United States

Circuit Court of Appeals

For the Ninth Circuit.

Appetles. (IN FOUR VOLUMES)

OLAF LIE, Master of the Norwegian Steamship "SELJA," on Behalf of Himself and the Owners, Officers and Crew of Said Steamship, Appellant,

vs.

SAN FRANCISCO & PORTLAND STEAMSHIP COMPANY, a Corporation, Claimant of the American Steamship "BEAVER," Her Engines, etc.,

Appellee.

VOLUME III. (Pages 769 to 1104, Inclusive.)

Upon Appeal from the United States District Court for the Northern District of California, First Division.





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Q. Do you know that there has been data secured showing the difference between the actual running of the ship as shown by observations and the run as shown by the log, and that this data has been published? Have you seen any such?

A. I don't quite understand you.

Q. For the purpose of testing the reliability of logs— A. (Intg.) We always do that.

Q. Publish the data?

A. We always test our logs that way. If you are running along the coast, for instance, you would get your observation by bearings and also read your log; if there is any current, or if there is a head sea, you would find that the two would not agree. It is for that reason seamen are constantly testing their logs. It is not necessary for anyone to say anything special on that, because we are constantly testing it ourselves for our own information.

Q. But the tests I have reference to were for the very purpose of showing the log is reliable, that the log did not over-run or under-run except where currents were encountered, not where seas were encountered, or winds?

A. I have never seen anything that would prove that.

Q. You have never seen the published data on that particular matter? A. No, I have not.

Q. Where a given ship has been tested crossing say the Atlantic both ways, and different conditions of weather shown for each day and the comparison made

between the log reckoning and the observation run of the ship?

- A. That is done on every ship in the service.
- Q. And published?
- A. I don't know that it is published in pamphlet form, but every ship does that. There is not a ship [654—533] in the service that does not do that and keep the record in its own log. It is kept in the log. You can get all the information you want on that from the log of every ship in the service.
- Q. And you assume, or do you know, that the variation between the log and the run of the ship is caused by the head seas or by the following sea?
- A. It is my opinion from observation that it is affected.
- Q. Well, take this case: here is a steamer which has her nose pointed into a heavy swell; you say under those circumstances the log would over-run the speed of the ship? A. Yes, sir.
 - Q. Why? A. On account of the sea.
- Q. How would the sea affect the log in a way different from its effect on the ship, assuming that there is no current to deal with?
- A. The effect of the sea on the log would be entirely different from the effect of the sea on the ship on account of the two being entirely different. There is a little propeller working near the surface. You have the whole ship, and the propeller down a certain distance; I should not think the effect of that sea would be the same on the two.
 - Q. I certainly understand that you do not think

so, but I was wondering if you could explain the whys and wherefores of that phenomena?

A. That would require considerable mathematical demonstration to prove that if you want to prove it in any other way except observation. By constant observation you see that this thing constantly occurs. You find where you are bucking into a head sea, you constantly find your log will show more than you have gone, and it is natural, simply by experimenting that way, that you conclude that that is the reason.

Q. Could you not explain it all by interjecting into the [655—534] situation the current?

A. The current would affect it the same, would it not, just as you say? Suppose you are going through a current, that would set your ship back naturally, and it would set your log back too, would it not?

Q. Why would not the sea affect it in the same way?

A. I don't quite follow you.

Q. Why would not the sea affect the ship and the log in the same way that the current would affect the ship and the log?

Mr. DENMAN.—He just answered that question; he said one goes near the surface and the other is down in the water.

A. Let me get that again.

Mr. McCLANAHAN.—Q. Why would not the sea affect the ship and the propeller in the same

way that the current would, and to the same extent?

- A. Because of the difference between the two. I don't think the effect would be the same.
 - Q. You don't think it would?
 - A. No, on the ship and on the propeller.
- Q. It would be different whether it was the current or the sea?
- A. Whether it was setting at all, whether it was in a heavy sea, and that increases with the sea if you have a big heavy sea.
- Q. Is it your experience that the actual run of the ship always varies from the run shown by the log?
 - A. Yes, it usually does.
 - Q. Always?
- A. Yes, it usually does. With rare exceptions. It does in the majority of cases. I will not say what percentage. As a rule your log rarely shows exactly the actual distance between two points. [656—535]
 - Q. How do you account for that?
- A. Inaccuracy of steering; probably a slight error in your log. Those logs are not absolutely correct. We find some that have to have a correction applied to them. One of the best logs I have ever had underread about 10 per cent; you had to add about 10 per cent to it, and it was about as near right as you could get it. That was due to its construction.
- Q. Did you add the 10 per cent when you were going with the swell or against it?
- A. In general the 10 per cent was added to this log no matter how we were going. That was due

to the construction of the log.

Q. What would you say of a log that in a head-swell would over-run the speed of the ship from three-quarters to a whole knot in half an hour?

Mr. DENMAN.—In half an hour?

Mr. McCLANAHAN.—No, in one hour.

Mr. DENMAN.—I object to that as not being shown by any of the evidence in this case, or applying to any matter shown here, because the only case of over-running is six-tenths in an hour.

A. It would depend on the speed of the ship. For example, if a ship was only making 3 knots in an hour, one knot would be an enormous over-run.

Mr. McCLANAHAN.—Q. Suppose the ship was making between 12 and 15 knots?

A. The proportion of the distance run would enter into it, whether it was one per cent or 50 per cent of the distance; that would affect the probability of the amount being over-run. For instance, if you have gone 20 miles an over-run of your log of say one knot would not be excessive, but if you had only gone 5 miles and if your log over-ran one [657—536] knot, in one case it would be one-twentieth and in the other case it would be one-fifth.

Q. Oh, yes, I understand that, but my question covered that; I said in an hour she was making between 12 and 15 knots and she over-ran from three-quarters of a knot to a whole knot in that time?

A. Well, I think a whole lot would be about the extreme limit of that distance. I should think that

would be all that could be expected.

- Q. You have spoken of the effect on the speed of a ship heading into a head swell, and I believe you said that in your opinion it would decrease the speed? A. Yes, sir.
- Q. What makes you say that,—what would be the factors entering into the matter, and say a ship of the "Beaver's" type?
- A. The force of the sea striking against the ship would set her back.
 - Q. With no wind?
- A. With no wind. The force of the sea would be the main thing anyway. The sea would set her back much more than the wind.
- Q. Do you understand that the swell itself travels?
- A. Bucking into a swell reduces the speed of a ship.
 - Q. I say do you understand that the sea travels?
 - A. Do you mean the motion of translation?
 - Q. I mean the physical water, the body itself?
- A. No, I do not understand that. It only travels when it strikes shallow water. But that is a different thing altogether.
- Q. In deep water it does not travel, the motion is up and down?
- A. Yes, the motion is up and down, but that is not what stops the ship. [658—537]
 - Q. What is it that stops the ship?
- A. The ship striking in to the heavy big wall of water; to put an extreme case, if you struck a wall

Q. Is that true of a swell?

A. There is no difference between a swell and a sea of any kind. A swell is any big mass of water, and any big mass of water that a ship bucks into will retard her speed. It is the resistance.

Q. Does not the ship as she strikes the crest of the swell rise?

A. Yes, she rises and then she goes down and then she bucks into the next one.

Q. If it is a head sea, yes, but if it was a swell she would not buck into it, would she?

A. I don't know what difference there is between a swell and any other sea. A swell is a sea, is it not?

Q. Your testimony then, has been based on the assumption that there is a sea as distinguished from a swell?

Mr. DENMAN.—That is not his testimony; it is nothing like that.

Mr. McCLANAHAN.—Answer my question.

A. To me it is the same thing.

Q. That is, there is no difference to you between a sea and a swell?

A. No; that is, if I understand what you mean by a swell.

Q. What do you mean by a swell?

A. I mean that it is a big rolling sea. If the water is perfectly smooth and there is no swell there is no sea, is there, but if this water begins to have a motion then you get up a swell or a sea, just as

(Testimony of R. F. Lopez.) you choose to call it.

- Q. Don't you recognize that a head sea or a heavy sea, as we [659—538] understand the term, is caused by wind? A. Yes, sir.
- Q. And a swell, as distinguished from that is caused by something else, is it not?
 - A. No, it is caused by wind.
 - Q. Yes, wind that has passed? A. Yes, sir.
 - Q. Passed wind?
- A. It does not make any difference, the effect is there, it started this water in motion.
- Q. And there is no difference, in your opinion, between a heavy sea which is caused by present wind and—
- A. (Intg.) It is simply a difference in name; for instance, after a gale has gone down we speak of a heavy swell still hanging on; this thing is gradually diminishing after the force which created it has passed away. But what I mean is, that any ship that has to go into a swell or a sea, whatever you choose to call it, where that thing is coming toward the bow and the ship is going into that, that will retard its motion.
- Q. Don't you know, Captain, to the contrary, that these fast Atlantic liners travel faster in a heavy sea under the same number of revolutions of their engines?
 - A. No, I don't know that and I don't believe it.
 - Q. You don't know that? A. No.
 - Q. If it has been stated by a man in this case

who has made observations of it, you don't believe him?

- A. No, I don't believe him, that they go faster. I don't believe a ship was ever built that will go faster in a heavy sea than she will in smooth water. It is contrary to every principle of force and everything else.
- Q. When you state that the reduction of 3 knots from 15 might possibly be accounted for in the speed of the "Beaver" under a heavy head sea, you spoke of the propeller racing; is that a part of your understanding of the situation? A. Yes, sir.

[660-539]

- Q. Of course, I can understand very easily that if the propeller raced she would not make the speed she would if the propeller were submerged all the tim?

 A. That is correct.
- Q. You are not interested, Captain, are you, in this matter, one way or the other?
 - A. None whatever.
- Q. Do you know any of the parties to the litigation?
- A. I know the Vice-President and Manager of the Pacific Mail.
 - Q. Who it that? A. Mr. Schwerin.
 - Q. Do you know him quite intimately?
 - A. Very well, yes indeed.
- Q. Have you talked with him about the case at all?
 - A. No, not at all. I did not know that the thing

had occurred at all until Mr. Denman spoke to me about it.

Q. Captain, would the fact that the "Beaver" had injured her plates in this collision at all affect the question of the deviation of her compass?

Mr. DENMAN.—What injury to the plates?

A. That she injured her plates?

Mr. McCLANAHAN.—Q. In the bow of the ship, yes.

A. I should not think so, I should not think so; it might affect her speed.

Redirect Examination.

Mr. DENMAN.—Q. Captain, I want to ask you about one or two things. You were speaking of the vessel coming before the following sea and Mr. McClanahan said to you that the only deterrent that you had in mind was the yawing of the vessel. Supposing that that is sufficient to expose a part of the propeller, would that also deter the vessel?

- A. I think I said it would cause racing also. [661—540]
- Q. Any exposure of the propeller out of the water will diminish the power of the propeller, will it not?
 - A. Undoubtedly.
- Q. And the greater the exposure the greater the deterrent? A. Quite true.
- Q. That would apply to either going before the sea, or following it or into it? A. Yes.
- Q. You do not make a deviation-table for every degree of the compass, or deviation so much for every degree, do you? A. Every point.
 - Q. So that a man will estimate—

- A. (Intg.) He interpolates between the points.
- Q. He interpolates between the points the degrees? A. Yes.
- Q. As I understand it, your statement is that a current would carry the log along the same as the ship; that is, there would be a constant for the current and the ship but there would be a variable for the effect of the wave on the log as distinguished from the wave on the ship?
- A. That is right.
- Q. That is due to the fact that the ship sets deep in the water below the surface line of the wave and the log is up following the surface? A. Yes.
- Q. Now, as to variation in disturbance of the water, is that greater below the wave or in the wave itself?
 - A. In the wave itself is the great disturbance.
- Q. Is that greater at the periphery of the wave or at the center of its diameter?
 - A. At the periphery—at the top.
- Q. What do you mean by the setting home of the log?
- A. I mean the log being taken in the direction of the ship, toward the ship.
 - Q. By the following sea? A. Yes. [662—541]
- Q. Is that a well-known sea phrase, the setting home of the log? A. Yes, sir.
- Q. Is it known to the common sailor as well as to the officer?
- Mr. McCLANAHAN.—I object to that question as a conclusion.

Mr. DENMAN.—The point I am making is this: if this phenomena has finally been turned over or incorporated in a homely phrase, that that fact would have a value in determining its weight.

Mr. McCLANAHAN.—And the point I make is that the Captain is not familiar with what the common sailor knows. If he is, he is a phenomena himself. He may be familiar with what the common sailor is supposed to know.

Mr. DENMAN.—Q. In your lighthouse service, Captain, and the service in the Geodetic work, was it, or Coast Survey? A. Coast Survey.

Q. Are you brought in very close contact with the common sailor?

A. Not any more so than on a man-of-war—about the same relations, very much the same.

Q. How about handling small boats, and that sort of thing?

A. Well, we handle small boats in about the same way. I think it is practically the same. My knowledge of sailors is about the same in one service as it is in the other.

Q. Do not the sailors constantly report to you? A. Yes.

Q. And if the phrase "set home" was a familiar sailor phrase, would they not be likely to hear it?

A. Yes.

Q. And do you not consider the phrase "set home" on the log, that that is a familiar phrase to describe that phenomena? A. I do.

Q. Would you consider six-tenths of a knot as an

extraordinary [663—542] or an unusual amount for a log to over-run a ship when going at 15 knots in the course of an hour?

Mr. McCLANAHAN.—I object to the question upon the ground that there is no evidence in the case to support the hypothesis.

A. I would not.

Recross-examination.

Mr. McCLANAHAN.—Q. I am reminded, Captain, by your redirect examination that you have been connected with the Coast and Geodetic Survey?

- A. Yes.
- Q. Are you familiar with this magazine or pamphlet which I hand you (handing)?
 - A. Tide Tables of the United States, yes.
- Q. That is an authentic record of Tide Tables on this coast? A. Yes.
 - Q. Recognized as authentic among seafaring men?
 - A. Yes, it is.
- Q. Will you please tell me by referring to that the time of high water at Fort Point.

(Addressing Mr. Denman.) Oh, let the witness tell me, Mr. Denman.

- Q. (Continuing.) On the 22d of November. 1910. What was the hour of high water in the afternoon?
 - A. In the afternoon it would be 3:10.
 - Q. What was the height of the water?
 - A. 4.8 feet.
- Q. Will you please tell me the tidal difference between Fort Point and Pt. Reyes?
 - A. It is plus four-tenths feet.

Q. What time would it be high water at Pt. Reyes on that day?

A. It is minus 14 minutes from 3.10; that would be 2.56. [664—543]

Further Redirect Examination.

Mr. DENMAN.—Q. Let me ask you, Captain, with regard to yawing, a good helmsman will practically correct up the yawing in one direction or another and keep on his course, will he not, on the average?

Mr. McCLANAHAN.—I object to the question as to what a good helmsman would do.

A. He would correct it much better than a poor helmsman would. He might not be able to correct it altogether. I do not think he would. It would depend on the strength of the sea and so forth.

Mr. DENMAN.—Q. And when you say "not altogether," don't you expect a good helmsman under such circumstances will bring out the vessel approximately where you intend to go?

Mr. McCLANAHAN.—I object to that as calling for the conclusion and expectation of the witness, and not evidence.

A. He would do better than a poor helmsman, but just how near he would get to the course would be impossible to tell.

Mr. DENMAN.—Q. Would you not expect him to approach it with fair accuracy?

A. Yes, with a certain amount of accuracy.

Q. Captain, you have been testifying concerning the amount of time at full speed you estimated the "Beaver" made between 4 o'clock and 5:19 under

certain conditions; did you prepare this table (indicating)? A. I did.

- Q. And that is correct, is it?
- A. It is correct.
- Q. That is, the data that was given you?
- A. Yes, sir, the data that was given me.

Mr. DENMAN.—I offer this in evidence.

(The document was marked Respondent's Exhibit "D" and is as follows:) [665—544]
Bells.

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4 o'clock ½ half speed.
                                              min.
                     \dots 7 min. ½ speed— 3.5 full speed
4.07 '' full
4.07 to 4.12 picking up.....5 " 3/4 " — 3.75"
                                                        66
                                           -51.00 ''
4.12 to 5.03 full speed.....
5.03 ahead slow
5.04 stop
                            8 min. 3/4 " — 6.00"
                                                        66
                            3½ min. 3% " — 1.25 "
5.05 ahead slow
                                                        66
5.11 "
           half
                                               .75 "
5.141/2 "
                                                        66
           slow
5.16-\frac{1}{2} to 5.19 stopped. 2 min. \frac{3}{8}
                                                .50
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2½ ¼ about 66.75 " Further Recross-examination.

Mr. McCLANAHAN.—Q. What do you mean by "correct," Captain? You mean that is the result of your judgment in the matter?

- A. No, I referred to my work.
- Q. That is, you mean your figures are right?
- A. Yes, they are correct.
- Q. And, of course, are the result of your estimates?
- A. Yes, and that I made that; not as to whether or not the "Beaver" went that distance in that time.

(The further hearing of this matter was thereupon continued until to-morrow, Thursday, July 20, 1911, at 10 A. M.) [666—545]

Thursday, July 20th, 1911.

[Testimony of Octavia Buckingham, for Claimant.]

OCTAVIA BUCKINGHAM called for the claimant, "Beaver," sworn.

Mr. DENMAN.—Q. Mrs. Buckingham, what is your occupation?

- A. Stenographer and bookkeeper.
- Q. How long have you been in my employ?
- A. Nearly two years.
- Q. Were you in my employ at the time we took the statements of the sailors and officers of the "Beaver"? A. Yes.

Mr. DENMAN.—I will state that Mr. McClanahan has indicated to me that he desires to get the original dictation of the statements made by me at the time the witnesses were here. As these are privileged communications under the law of California I voluntarily put my stenographer on the stand for the purpose of giving him a chance to examine the statements.

Mr. McCLANAHAN.—Now, let me make a statement—

Mr. DENMAN.—You will see my point in a moment.

Mr. McCLANAHAN.—Well, I see your point. You are doing something that I could do myself without your granting me the privilege, namely, I could call your stenographer if I wanted her. I do not

want what you have stated at all. I wanted simply to examine the young lady on the matter of Judson's statement in this office with respect to the conversation held between Captain Kidston and Captain Lie on board of the "Beaver"; and also to examine the young lady as to the statement made by Ettershank, the Second Officer. That is all. I do not consider that your statement that the statements made under those circumstances are at all privileged is correct.

[667—546] They are statements made by outside third parties to your stenographer, or to you, and taken down by the stenographer.

Mr. DENMAN.—You will see in one moment, Mr. McClanahan, that you misunderstood the situation.

- Q. Who gave you the language that you have written in your book of these statements? Was it made directly from the witness to you or from the witness to me and from me to you?
- A. I was here when the witness made the remarks and you put them into narrative form in English.
 - Q. And you took them down at that time?
 - A. I took them down at that time.
- Q. So the statement, so far as you have it on your book, was made from me to you? A. Yes.
 - Q. Will you turn to the statement of Judson?
- A. This statement is evidently, Mr. Denman, the disjointed remarks I took down from Judson; is that the one you want?
- A. That is correct, yes. By the way, are you a court stenographer? A. No.
 - Q. Can you take a running conversation?

A. No; I cannot.

Q. Just read Judson's statement as you have it there.

Mr. McCLANAHAN.—I object to the witness reading Judson's statement.

Mr. DENMAN.—Well, take the witness, Mr. Mc-Clanahan. I was going to give what you asked for; now you take it yourself.

Mr. McCLANAHAN.—No, I did not ask for anything from you, Mr. Denman. I am perfectly surprised that you would call this witness for the purpose you have stated. It is entirely irregular. There must be some object that you have in mind in doing so. I said that I would want your young lady stenographer with her notes on rebuttal; now you have called her on your [668—547] main defense and asked her to read a statement which was made here in your office. I say that is entirely irregular. However, whatever your purpose may be in this proceeding, I will take the advantage of cross-examining her.

Cross-examination.

Mr. McCLANAHAN.—Q. Mrs. Buckingham, do you remember this man Judson?

A. I suppose I should know him if I saw him again.

Q. That you should know him?

A. No, I don't know that I could pick him out. I remember he was here.

Q. You remember the man was here? A. Yes.

Q. Although you might not recognize him if you

(Testimony of Octavia Buckingham.) saw him on the street?

- A. No, I don't think I should.
- Q. Who was present when he made his statement?
- A. Captain Kidston and Ettershank were in the room a part of the time; I could not say just what part.
 - Q. When was this statement made?
 - A. About the 19th of January.
- Q. Why do you say about; don't you know exactly what date?
- A. No, I do not, but as far as I can figure that is the date.
 - Q. Would not your notes show the date?
- A. That is the date I figure from my notes, judging from letters written before and after that.
- Q. Was that the date also that Ettershank made a statement? A. Yes.
 - Q. On the same date? A. Yes.
 - Q. They were here together? A. Yes.
- Q. In the Judson statement, was there any reference made by Judson to a conversation which he heard between Captain Lie and Captain Kidston on the bridge of the "Beaver" on the day [669—548] of the collision? Holding that question in abeyance for a moment I will ask you if you have not read your notes very recently?

 A. No, I have not.
 - Q. You have not? A. No.
- Q. Then read them and find out if there is any reference to a conversation. While you are reading to yourself these notes I will ask you if you have any independent recollection as to whether there was

(Testimony of Octavia Buckingham.) such a statement?

- A. Well, I know several of the men did hear the conversation but I could not at the present time say just which of them did. Here it is. Captain Kidston—
- Q. (Intg.) Just answer the question whether such a statement in reference to a conversation was made, or whether it was not made by Judson?
 - A. It was made.
- Q. Just read it through to yourself; be sure of that? A. Yes, it is there.
- Q. After this statement was made by Judson, did you make a transcript of it? A. Yes.
- Q. Of the statement as he had made it, or as it was revised by Mr. Denman?
 - A. I made one as he made it.
 - Q. As he made it? A. Yes.
- Q. And do you know whether he subsequently signed that statement or not?
- A. I believe he did; I did not actually see him sign it.
- Q. You say he made the statement and you took it down in shorthand and then transcribed it later as he made it? A. Yes.
- Q. Prior to his making the statement, was there any conversation of which you have notes that led up to his making the [670—549] statement, with reference to the statement?
- A. There was some conversation but I did not make notes of it. There was some general conversation.

- Q. Some general conversation? A. Yes.
- Q. Between Denman and Kidston and Ettershank and Judson altogether?
 - A. That I could not say.
 - Q. Well, Mr. Denman was here?
- A. Mr. Denman was here; they were all here, but just who participated in the conversation I could not say.
- Q. But it was a general conversation with reference to the conversation on the bridge?
 - A. Yes.
- Q. And then after that conversation had cleared the matter up, Mr. Judson made his statement to you? A. Yes.
 - Q. Now, will you read his statement as he made it?
- A. (Reading:) "I did not hear any whistle; I was in bed but got up after the collision."

Mr. McCLANAHAN.—I will have to ask that that be stricken out.

- Q. I want, Mrs. Buckingham, the statement of Judson with reference to the conversation on the bridge that you subsequently transcribed for him to sign.
- A. (Reading:) "He came on board. Captain Kidston went over and pulled his coat apart and said, 'I see you have dry clothes on'; 'Yes, I have dry clothes on'; 'I am very sorry the accident happened.'" That was Captain Kidston's remark. "I had heard the whistle—I knew it was the 'Bear' or 'Beaver' for 15 minutes and had stopped more than 10 minutes dead still in the trough of the sea

(Testimony of Octavia Buckingham.) taking soundings. We stopped still and got 32 fathoms. Then Lie went below." [671—550]

- Q. Now, will you please look through your further notes and see if there was any other statement made by Judson at that time with reference to the conversation on the bridge? In other words, I want to know if you have given us all of his statement with reference to the conversation on the bridge?
 - A. That is all there is of it.
- Q. You took no further notes of Judson's remarks at this meeting with reference to the conversation on the bridge, than you have given me?
 - A. No, none whatever.
 - Q. And subsequently you took none from Judson?
- Q. In fact, you had nothing more to do with the man after that, did you? A. No.
 - Q. And you had not taken any prior to that?
 - A. No.
 - Q. Did Mr. Ettershank make a similar statement?
 - A. Yes.
- Q. With reference to the conversation on the brige? A. Well, that I don't know; I will see.
- Q. I don't mean similar to the conversation itself, but he made a statement at that time, did he?
 - A. Yes.
- Q. And it was from his statement at that time that you drafted the written statement that he subsequently signed? A. Yes.
- Q. Now, will you turn to Mr. Ettershank's statement; have you got it? A. Yes.
 - Q. Just his statement of the conversation on the

(Testimony of Octavia Buckingham.) bridge; please read it.

- A. (Reading:) "Captain Kidston remarked that he had on a dry suit and then said he was terrible sorry the accident happened. Captain Lie was nervous and shaking but he said he was all right. He said he heard our whistle for 15 minutes before the collision, knew it was either the 'Bear' [672—551] or the 'Beaver,' that he had been taking soundings and that he had been at a standstill rolling the trough of the seas for over 10 minutes before the collision." That is all there is about the conversation.
- Q. And that you subsequently put in a transcribed form for him to sign? A. Yes.
- Q. He made no further statement in your presence with reference to the conversation on the bridge than that which you have given? A. No.
 - Q. Nor had he made one prior to that to you?
 - A. No.
- Q. After you had transcribed both of these statements which you have now placed in the record in this case, did you make any changes in them under Mr. Denman's orders or directions?
- A. No. The scrap conversation, of course, was put into English. Of course, if Mr. Denman asked a question and the man said "yes," if I put down "yes" it would not mean anything.
- Q. I have been misled by you. I understood that what you have given in the record here of these two respective conversations was all—
 - A. (Intg.) That is absolutely as they gave it.
 - Q. And that was all that they gave with reference

(Testimony of Octavia Buckingham.) to the conversation on the bridge? A. Yes.

- Q. Now, I say you put that statement as it was given to you into a transcribed form?
 - A. Yes, exactly as it came from them.
- Q. And that transcribed form has never been changed by you? A. Oh, no.
- Q. So that the transcribed form should agree with what you have stated here? A. Yes. [673—552]
 - Q. Nothing was added to it or taken from it?
 - A. No, nothing whatever.
- Q. How soon after the statement was made did you transcribe it?
- A. Well, I presume I did it right away; I don't remember.
 - Q. And then you turned it over to Mr. Denman?
 - A. Yes.
 - Q. And that is the last you have seen of it?
 - A. Yes.

[Testimony of William Kidston, for Claimant.]

WILLIAM KIDSTON, called for the claimant "Beaver," sworn.

Mr. DENMAN.—Q. Captain, how old are you?

- A. 48.
- Q. How long have you been at sea?
- A. 33 years.
- Q. All seas?
- A. There are a few seas I have not been on.
- Q. Can you mention them better by exception than by giving the whole list? You have sailed the Meditterranean, have you? A. No.
 - Q. That is one of the exceptions?

(Testimony of William Kidston.)

- A. That is one of the exceptions.
- Q. You have sailed the Pacific and the Atlantic?
- A. Yes, sir.
- Q. And the Indian Ocean? A. Yes.
- Q. The China Seas? A. Yes.
- Q. When did you first get your officer's papers?
- A. 1885 or 1886, I forget which.
- Q. In either 1885 or 1886? A. Yes, sir.
- Q. And when did you get your master's papers?
- A. One year later after I got my first papers.
- Q. When did you get your first command?
- A. At that time. I was about 23 years old when I first took a command.
- Q. Have you ever served at sea in any other capacity than commander since then?
 - A. Yes, as First Officer. [674—553]
 - Q. How long a time did you serve as First Officer?
- A. Oh, I could not specify the time. Off and on. My first command was steam. Some years afterwards I went in a sailing ship and had the command of a sailing ship for three years. After I gave up the sailing ship I went back into steam and had to go as First Officer, and I went off and on as First Officer, but I don't know how long it was before I got command of a steamer again.
- Q. How long have you been in command of steamers, roughly speaking?
 - A. 12 or 14 years, I should say.
 - Q. On this coast? A. And on the Atlantic.
 - Q. Sailing from the Atlantic to the Pacific?
 - A. Yes, sir.

(Testimony of William Kidston.)

- Q. Are you familiar with the waters of the coast of California? A. I think I am.
- Q. And with the climatic conditions on this coast? A. Yes, sir.
- Q. How long have you been commander of the "Beaver"?
- A. I took command of the "Beaver" at Newport News, in February, 1910, the date I don't remember, and I was Commander of her until the 22d of November, 1910. I brought her out here to this coast.
 - Q. And then ran her on the coast?
 - A. And then ran her on the coast.
- Q. Had you been in the employ of the Pacific Mail—
- A. (Intg.) Just a moment; I was out of her one voyage after I arrived here; I was sick and when she was ready for sea in June I was sick in the hospital and another commander took her up and then I took her on the second trip.
 - Q. You have been sick recently too?
 - A. Yes. [675—554]
 - Q. And you have been in a hospital?
 - A. No, I was home this time.
- Q. You have recently been under an operation, have you not? A. Yes, sir.
- Q. During the period you had command of vessels, and prior to the time of the collision with the "Selja," had you ever lost a vessel? A. No, sir.
- Q. Did you ever have any injury to a vessel that you had command of?

San Francisco & Portland Steamship Co. 795 (Testimony of William Kidston.)

- A. I don't recollect of ever injuring a ship in my life.
- Q. You say you had been in command of the "Beaver" with the exception of one voyage from the time she left Newport News until the collision?
 - A. Yes, sir.
- Q. You are as familiar as anybody in the world is with the handling of that ship, are you not?
- A. Yes, sir. I watched her building; I launched with her—no, not launched with her, but I was on her trial trip with her.
- Q. Do you recollect the 22d day of November, 1910, leaving the port of San Francisco on a northern voyage?
 - A. Do I remember the 22d of November, 1910?
 - Q. Yes. A. Yes, sir.
 - Q. By what route did you leave the port?
 - A. Up the North Channel.
- Q. What was the condition of the water in the channel as you came through?
- A. There was a very heavy break on the North Bank, with the swell reaching across the channel, a beam swell.
 - Q. Was there much of a swell in the channel?
 - A. Quite a bit of a swell. [676—555]
- Q. Was it enough to impede or retard the progress of your vessel, coming on her beam?
 - A. I did not think so.
- Q. After you left the North Channel, what course did you sail—your first course?
 - A. After we left No. 2 Buoy our first course was

(Testimony of William Kidston.) south 83 degrees west.

Q. How long did you continue on that course?

A. 30 minutes.

Mr. McCLANAHAN.—Q. How long did you say?

A. 30 minutes; that is my best recollection, 30 minutes.

Mr. DENMAN.—Q. And what course did you then make? A. North 86 west.

- Q. Was that a regular voyage you were sailing on to the north? A. Regular courses.
- Q. And did your vessel make regular trips north? Where were you going then, Captain?
 - A. To Portland, Oregon.
 - Q. Was that a regular trip of your steamer?
 - A. Regular; every two weeks.
- Q. And were those the usual courses on which you sailed on that voyage? A. Yes, sir.
- Q. What was the condition of the sea after you left the North Channel?
- A. After we left No. 2 Buoy—when we got out to No. 2 Buoy we commenced to get the effect of a heavy westerly swell.
 - Q. What is No. 2 Buoy, what buoy is that?
- A. It marks the northern entrance to the North Channel.
- Q. And that is on the westerly or easterly side of the channel, which?
 - A. It is on the westerly side of the channel.
- Q. Whereabouts on this voyage did you string your log?

A. We generally put it up just before getting to No. 2 Buoy.

Q. And did you string your log there on this occasion?

A. Yes; that is in order to get the turns out of the lines and [677—556] have it ready for setting at No. 2 Buoy.

Q. Well, you strung it before arriving at No. 2 Buoy?

A. Yes, and then set it at No. 2 Buoy.

Q. You were describing the weather; was this an ordinary swell or was it unusual?

Mr. McCLANAHAN.—I think, Mr. Denman, the witness knows more about swells than you do and if you ask him what was the character of the swell it will be more appropriate.

Mr. DENMAN.—But I asked him the two alternatives, ordinary or unusual.

Mr. McCLANAHAN.—I am willing to let the ordinary matters go without objection in this examination, Mr. Denman, but not on any material matters.

Mr. DENMAN.—Q. What do you say as to the condition of the sea on that day after you left No. 2 Buoy?

A. I would say that after we left No. 2 Buoy the swell was a heavy swell.

Q. Did that increase or decrease as you proceeded on the voyage?

A. As we drew up to and passed Duxbury Reef it commenced to increase the volume of the swell.

(Testimony of William Kidston.)

- A. I ordered the helm hard to port and stop and full speed astern.
 - Q. How did you give your signal "stop"?
 - A. By the telegraph.
- Q. Where did you say you heard that second whistle?
- A. When I heard the second whistle it seemed to me a point on the starboard bow.
 - Q. A point on the starboard bow?
 - A. As near as I can judge.
- Q. It was in the same place as where the Second Officer reported to you?
- A. It was the same as he reported, yes. The whistle in the fog is very hard to locate to a point, or half a point, coming on suddenly, where you only get the sound for maybe 3 or 4 seconds.
- Q. You say you ordered full speed astern, was that order obeyed? A. Yes, sir.
 - Q. How soon? A. Immediately,
 - Q. How could you tell that, Captain?
- A. The moment that that order is obeyed, we can feel the motion, the vibration.
 - Q. The vibration of the ship? A. Yes, sir.
- Q. Did you have a lively vibration on this occasion? A. Very.
 - Q. What is the horse-power of your ship?
- A. We have developed in the neighborhood of 4800 horse-power. [680—559]
 - Q. What do you think you had on that day?
 - A. Oh, I suppose maybe 4,000 or 4,200.
 - Q. 4,000 or 4,200 horse-power? A. Yes.

- Q. What effect does it have on your ship to go full speed astern? How was your helm?
 - A. Hard-a-port.
- Q. How does it affect the direction in which your vessel will travel through the water while going ahead and before she comes to a stop, by putting the helm hard-a-port and your propeller full speed astern? A. It swings her stem to starboard.
- Q. What sort of a propeller did you have, a right-hand or a left-hand? A. A right-hand.
- Q. And is that the usual effect of a right-hand propeller?

 A. I found it so on that ship.
 - Q. Does she respond rapidly, or not?
 - A. Very.
 - Q. Very rapidly? A. Yes.
 - Q. And did she begin to swing? A. Yes, sir.
- Q. At the time you gave the signal full speed astern, had you seen the "Selja"? A. No, sir.
 - Q. How soon after did you see her?
 - A. Some seconds; I would not be sure how many.
 - Q. Where was she lying when you saw her?
 - A. She was a little on our starboard bow.
 - Q. Where was she lying with reference to the sea?
 - A. In the trough of the sea.
 - Q. About what angle was she lying from you?
 - A. Right angle.
 - Q. Did you strike her? A. Yes, sir.
- Q. Under what circumstances? Just describe the circumstances of the striking. Whereabouts did you hit her?

- A. Forward of amidships. I would say about her No. 2 hatch.
 - Q. About her No. 2 hatch?
- A. Probably a little forward of her No. 2 hatch. [681—560]
 - Q. Do you know how far you got into her?
 - A. 10 or 12 feet.
- Q. What caused you to penetrate that far? By the way, is that a weak or a strong portion of her construction, where you struck her?
- Mr. McCLANAHAN.—I object to the question upon the ground that the witness has shown no familiarity with the structure of the "Selja."

Mr. DENMAN.—Answer the question.

- A. I would say that if we struck her by the forehatch, abreast of the fore-hatch, naturally it would be a little weaker than if we struck her some place else.
 - Q. What was the reason of that?
- A. Well, she had very wide hatches and the supports of her beams and her construction from her hatches out to her shell-plates would not be all the way across and would not have so much ability to stand it as if I had struck her on the amidships section where her beams run all the way across the ship.
- Q. That is a weaker place than where there is athwartship bulkheads? A. Yes, sir.
- Q. What speed do you think you had when you hit her? A. I did not think we had any speed.
 - Q. Well, how did you come to hit her?

A. My ship looked to be still; it looked as though I had got the headway off her.

Mr. McCLANAHAN.—Q. Are you referring now to the "Selja" or the "Beaver"?

A. I am talking about the "Beaver"; but she may have had a little headway; I would not be certain.

Mr. DENMAN.—Q. Is she very sharp in construction?

- A. Very sharp. But it seemed to me as though the penetrating [682—561] we done was more a chop into her than it was a ram.
 - Q. What would cause a chopping motion?
- A. I think that just as we came in contact with the ship we had raised on the swell and as we came down we hit her and it was a sort of a chop, and after we once penetrated the athwartship section and her shell-plating there was nothing to stop us from going 10 feet more into her.
- Q. About in what direction was the "Selja" pointing with reference to the swell at the time you struck her?
 - A. She was heading up toward the swell.
- Q. You don't mean by that she was heading right into the swell?
- A. No, she was heading toward the swell. She had turned out a bit out of the trough and was headed toward it.
 - Q. She sunk subsequently, did she not?
 - A. Yes.
- Q. What direction was she pointing when she sunk?

- A. It looked to me as though she was pointing head in to the swell exactly.
 - Q. Could you tell?
- A. I say it looked to me as if she was pointing head in to the swell when she sunk.
 - Q. Did she go down upright, or how did she sink?
- A. She went down headfirst until I presume her bow hit the bottom and then she steadied that way just a little while, with her stern sticking out of the water I should say 100 or more feet, and then she gradually turned over bottom up and sank.
- Q. What was the condition of the weather as you were sailing on this last course of yours?
 - A. It was foggy.
- Q. Did the sea continue in this condition that you found it at the beginning of the course?
- A. Yes, getting a little heavier as we drew out clear of the land. As we opened up the point the sea came down a little [683—562] heavier.
- Q. Had you ever experienced as heavy a sea as this on this run of this vessel?
- A. Oh, yes, I have experienced just as heavy a swell.
- Q. About what speed do you think you were making through the water at say 3 o'clock on that day?
 - A. In the neighborhood of 12 knots.
- Q. How much do you think, in your opinion, the sea—the swell—had cut down her speed?
 - A. About 3 knots.
- Q. I forgot to ask you,—yours was a passenger-ship? A. Yes, sir.

- Q. You were on passenger travel?
- A. Yes, large passenger travel.
- Q. Had you given any orders changing the speed of the vessel from 3 o'clock that day?
 - A. Yes, sir.
 - Q. What speed did you order? A. 76 turns.
 - Q. Why did you do that?
- A. I wanted to regulate the amount of turns the ship could make so as to know if possible what she was doing—what she would be doing.
- Q. About what rate do you ordinarily run on those voyages? A. Oh, 77 or 78 turns.
 - Q. Sometimes you get up to 79?
- A. Yes, and sometimes up to 80; sometimes a little more and sometimes a little less; generally about 77 or 78 turns.
- Q. At the time of the collision could you see land—when the collision occurred itself? A. No.
 - Q. Did the fog lift any at any time?
- A. Just after the collision the fog lifted; it cleared away quite a bit.
 - Q. Could you see land? A. Yes. [684—563]
- Q. Could you make out any point that is known to you on the shore? A. Yes, sir.
 - Q. What did you see?
 - A. Pt. Reyes; South Point.
- Q. About what distance did Pt. Reyes seem to you to be, about what distance?
 - A. Oh, 5 or 6 miles it seemed to me.
 - Q. And South Point?
 - A. About 4 miles.

- Q. You are familiar with those two points?
- A. Yes, sir.
- Q. Sufficiently familiar so as to know those two points when you see them? A. Yes, sir.
- Q. What, if anything, did you do with reference to saving the crew of the "Selja"?
- A. Just as soon as we backed out of the hole of the "Selja" I could plainly see that the ship was doomed to sink; I called boat's quarters and cleared away all the boats and ordered two boats lowered. These boats were lowered and went to the assistance of the "Selja" in rescuing her crew.
 - Q. Did you succeed in rescuing the crew?
- A. They were all saved with the exception I understood of two Chinamen who were drowned.
 - Q. Did you return to San Francisco?
 - A. Yes, sir.
 - Q. Had your vessel suffered any injury?
 - A. Yes, sir.
 - Q. What had happened?
- A. She stove in her bow plating and her stem forward of the collision bulkhead. I will put it this way, she bent and twisted up her stem and stove in her shell-plating forward of the collision bulkhead.
- Q. About what time did you start back to the city, Captain?
- A. I think I gave the order to go ahead slow, on the starboard helm, at 3:57.
- Q. What course did you steer back—directly to the North Channel?
 - A. No, to the light-ship. I steered by ship's com-

pass—standard compass, south 71 degrees east. [685—564]

- Q. Is there any deviation on that compass of your's? A. Yes, sir.
 - Q. How much is the deviation?
 - A. On that course it is about 4 degrees easterly.
- Q. Who had computed the deviation on your compass? A. I have myself, and my officers.
- Q. How is that computed, for each degree or for each point on the compass?
- A. Each point, excepting that when we are steering the course I steer degree courses altogether.
 - Q. You steer degree courses?
- A. Yes, I steer degree courses, and always when the sun is visible, in the forenoon or afternoon, the officer on watch gets an Azimuth on that course and consequently he would have the deviation on the course I was then steering, which would be in degree; but taking it directly from the compass when I swing the ship it is always on points, which is considered near enough for practical navigation.
- Q. So that on steering your course south 71 east, and correcting 4 degrees, you do that by averaging between the point nearest to the south and nearest to the east on the compass?
- A. Yes, whatever deviation we would get on the nearest to that.
 - Q. The point nearest to that?
- A. Yes. I think, though, if I recollect right, that we had got some deviation on 73. That would be our usual course from Pt. Reyes down to the Light-

ship. If I remember right we probably had got some Azimuths on that course.

- Q. You got on your course, you say, at 4 o'clock—pardon me—what time did you say?
- A. I started to swing the ship on the starboard helm at 3:57.
 - Q. And what time did you get on your course?
 - A. I think about 4 o'clock. [686—565]
 - Q. Which way had you swung?
 - A. We had swung around on the starboard helm.
- Q. And what direction were you pointing when you started?
- A. To the west, or probably a little north of west when I started to swing.
- Q. So that you swung around in a semi-circle and got on your return course at about 4 o'clock?
 - A. About 4 o'clock.
 - Q. What speed were you making then?
- A. I started with a slow bell and then half speed; half speed when we got on our course. I run at half speed for a little while, until I sent the first officer to examine the collision bulkhead, and he reported back to me that everything was all right; it was some minutes after that when I went ahead full speed.
 - Q. Do you recollect how many minutes it was?
- A. I know what is in the log-book, and it seems to me that is about right, 7 or 8 minutes.
 - Q. 7 or 8 minutes, you say? A. Yes.
- Q. Would your log-book refresh your memory in that regard, Captain? A. Yes, sir.
 - Q. Just look at it. What was your first order to

the engine-room after 4 o'clock?

Mr. McCLANAHAN.—Q. Captain, did you make these entries in this log?

A. No, I never make the entries in the scrap log.

Q. Then how will the log refresh your memory?

A. By seeing it here would refresh my memory.

Q. But they were made by another man, were they not? A. By my orders.

Q. But made by some other man?

A. But by my orders, yes, sir. [687—566]

Q. Then how would they refresh your memory if the entries had not been made by you?

Mr. DENMAN.—Q. They were taken down under your orders at that time, Captain?

A. They were taken under my orders at that time.

Mr. McCLANAHAN.—Would you let the witness answer my questions, Mr. Denman, and not answer them yourself?

Mr. DENMAN.—He is my witness.

Mr. McCLANAHAN.—Yes, but you can't answer the questions for him.

Q. You must know, Captain, that in order to refresh your memory it must be done by some act that you yourself performed?

A. Well, I did not perform this act.

Q. If it was performed incorrectly, and in disregard of your orders, it would not refresh your memory except erroneously, would it?

A. But I do remember that it was 4:07 or 4:08, as I answered the question before.

- Q. Without refreshing your memory by what some other man did, you now remember it, do you?
- A. I know it must have been 4:07. I know it was 4:07 or 4:08 now that it is in the log-book, put there by my orders; it must have been 4:07.
- Mr. DENMAN.—Q. Now, Captain, taking the log, if it is necessary, how long did you continue under a full speed bell? A. Until 5:03.
- Q. Do you recollect the bells you ordered after that?
- A. I slowed the ship after that and I stopped her and then I went ahead half speed after that.
- Q. Were those maneuvers done under your direction? A. Yes, sir.
 - Q. Was the log made up under your direction?
 - A. Yes, sir. [688—567]
- Q. Were they entered in the log under your direction? A. Yes, sir.
- Q. Did you examine the log shortly after the trip on that day? A. No, I did not.
 - Q. Did you examine it coming in on that day.
- A. Coming down that day from the light-ship, yes, I examined the log, coming down from the wreck to the light-ship I examined the log.
- Q. But after that did you make any particular examination of it? A. No.
- Mr. DENMAN.—Mr. McClanahan, will you admit that the second mate will testify that these entries in the log-book, as to the time at which these various bells were given on the return voyage, would be as appears in the log?

San Francisco & Portland Steamship Co. 811 (Testimony of William Kidston.)

Mr. McCLANAHAN.—Has that not already been put in?

Mr. DENMAN.—I don't think so. I recollect that you put in these bells and you put them in only up to the return, but did not cover the remainder of that period.

Mr. McCLANAHAN.—Well, I will make that admission, but I do not care to admit that the captain can refresh his memory by inspecting the work of the second officer. If you want to get into the record that the second officer, if called, would testify that he made these several entries in conformity with the orders from the captain, all right.

Mr. DENMAN.—Very well. At 5:03 the log shows "slow ahead"; 5:04, "stopped"; 5:05, "slow ahead," "spoke Revenue Cutter 'McCullough'"; 5:10, "half speed"; 5:14, "slow speed"; 5:16, "stop"; 5:19, "light-ship abeam."

Mr. McCLANAHAN.—And I want the other entry after 5:19.

Mr. DENMAN.—5:19, "slow ahead."

- Q. On which side of your vessel did you pass the light-ship? [689—568]
 - A. On the starboard side.
 - Q. Did you see her clearly? A. Very.
- Q. And from the light-ship you came into the harbor and finished your home trip? A. Yes, sir.
- Q. Do you know if the log was read at the time of the collision? A. Yes.
 - Q. Was that reading reported to you?
 - A. Yes, sir.

- Q. What was reported to you?
- A. The log was hauled in immediately I gave the order to stop and go astern, and the reading of that log was reported 19.6.
- Q. How were these various orders regarding the speed of the vessel up to the light-ship executed?
- A. By telegraph. Now, I want to qualify that: Previous to ringing full speed ahead, at 4:07 as shown by the log-book, I had sent the first officer to report to me the condition of the collision bulkhead and if the ship was making any water. He said that the ship was not making any water, that the forepeak tank was still fresh water. Then I knew there was no volume of pressure from the outside to amount to anything. Then I thought I could risk giving her more speed, as it was essential for us to get in as soon as possible because it was coming on night; it was pretty thick fog down over the bar. I had sent for the Chief Engineer and I told him I was going to ring her up full speed, but for him not to press her too hard and see how the bow stood it. But it was by the telegraph to the engineer that the order was given for full speed.
- Q. And that is true of these other orders that are mentioned here in the log? A. Yes, sir.
 - Q. And they were executed? A. Yes, sir.
- Q. How long had you been off the bridge at the time that the [690—569] second officer reported to you the first whistle of the "Selja"?
 - A. Oh, I could not have been—I was not a minute.
 - Q. You were not a minute?

- A. No, I could not have been more than a minute.
- Q. Had you heard any whistle from the "Selja" prior to that time? A. No.
- Q. Two whistles were all the whistles that were heard of the "Selja" so far as you know?
 - A. So far as I know.
 - Q. What sort of whistles were they?
 - A. You mean in volume?
 - Q. No, in number?
 - A. Regular fog signal, one whistle.
 - Q. One whistle? A. Yes, steaming signal.
- Q. What would have been her signal if she had been lying dead in the water, and giving the proper signal?

Mr. McCLANAHAN.—I object to that question, to the latter part of it, "and giving the proper signal." There is no evidence here that she had not given the proper signal.

Mr. DENMAN.—This is a question addressed to an expert.

Mr. McCLANAHAN.—Oh, you mean what would have been the proper signal if the ship had been dead in the water—is that the question?

Mr. DENMAN.—Yes, that is the question.

- A. A vessel dead in the water should have blown under those conditions two whistles, two long blasts.
 - Q. Those are fog whistles, also? A. Yes, sir.
- Q. So there are two kinds of fog signal whistles from one vessel to another in the fog? A. Yes.
- Q. One is if the vessel is under way and the other is if she is stopped? A. Yes. [691—570]

- Q. It is one whistle when she is under way and two whistles if she is stopped; that is correct, is it?
 - A. Yes, stopped, without any headway.
- Q. After the collision did you have any conversation with Captain Lie on the bridge of the "Beaver"?
 - A. Yes, sir.
 - Q. Whereabouts did that conversation take place?
 - A. On the bridge of the "Beaver."
 - Q. Who was present?
 - A. The Second and Third Officers.
- Q. State the conversation, as near as you can recollect it, what you said and what he said.
- A. When Captain Lie came upon the bridge, he came up on the starboard side, and I met him at the top of the ladder and, being previously acquainted with the captain, I knew him before, I shook hands with him and expressed my feelings as regards being sorry that the accident occurred. I also inquired if he had any dry clothes, and he said yes, although he was shivering; that was natural, the man had been overboard and was wet and was shivering. I didn't quite believe he had changed all his clothes and I felt his breast to see if he had dry clothes on. While I was doing that he made the remark that he had heard my whistle for 15 minutes and he knew it was either the "Beaver" or the "Bear" by the sound of the whistle and—
 - Q. (Intg.) Did he say why he knew it?
- A. No, he did it. We met him in Portland and I presume he heard our whistle there. That is the remark he made, that he knew it was either the

"Beaver" or the "Bear" by the sound of the whistle, and that he had been lying at a standstill for over 10 minutes in the trough of the sea, and that he had taken a sounding.

Q. Did he tell you what the sounding was?

A. Yes, he said 35 fathoms. [692—571]

Q. Where did you go with the captain?

A. After the mate came on the bridge, after the First Officer came on the bridge, I took him down to my room to give him some heavier clothing.

Q. Did you have any conversation with him after

you went below?

A. Oh, yes, we were talking after we went down in my room.

Q. Was there further conversation on the bridge

also?

A. Yes, there was further conversation on the bridge, not much, though.

Q. What else did you talk about there?

A. He told me on the bridge that he had been up from 2 o'clock in the morning, that he made the land or got his soundings at 2 o'clock in the morning, and he had not got any sleep practically all night, and he had had a fog. That was some of the conversation. That is about all the conversation that I recollect up there. Down in the room he also talked about the collision. I told him he should be thankful for one thing, that his wife and two babies had been saved and that there was no loss of life to amount to anything.

Q. You say you had known the captain personally?

- A. Yes, I had met him in Portland.
- Q. How much water did your vessel draw on that day, Captain?
- A. We were drawing 14 feet 3 inches forward and 18 feet 6 inches aft.
- Q. Would you say she was light or heavy, was she running light or heavy?
 - A. She was medium draught.
- Q. How about the exposure of her wheel, was that near the surface or far below it?
- A. It takes 18 feet and 2 inches to cover her propeller; [693—572] the propeller was 4 inches under water; that is, lying alongside the dock, at smooth water.

(A recess was here taken until 2:15 P. M.)

AFTERNOON SESSION.

WILLIAM KIDSTON, direct examination, resumed:

Mr. DENMAN.—Q. Captain, have you ever noticed, in the course of your experience at sea whether there is any difference in the comparative distance shown by the log and the distance travelled by the ship when the vessel is going into a head swell as distinguished from a going or a following swell. Have you noticed any difference? A. Yes, sir.

- Q. What is the difference?
- A. Usually going into a head sea most patented logs, in fact every log I have been acquainted with, will overrun the ship.
 - Q. And how about the reverse case?

San Francisco & Portland Steamship Co. 817 (Testimony of William Kidston.)

- A. Generally they will under-run if the sea is heavy.
 - Q. When it is following?
 - A. On a following sea.
- Q. Have you ever heard the phrase used by sailormen of the coming home or setting home of the log?
 - A. Yes, quite frequently.
 - Q. What does that apply to?
- A. I think that the phrase originated at the time of the old chip log when they used to heave the log, the log would come home some with the strain of the line on it.
- Q. Under what circumstances, on a following sea? [694—573]
- A. Well, a chip log would come home with a strain on the log line in any kind of a sea. I am only saying now where I think the phrase originated.
- Q. How is the phrase used nowadays with the patent log they use?
- A. Well, they consider it just the same; they say the log coming home on a following sea, a light rotator coming home.
- Q. You said something about the unreliability of whistle sounds in fog in determining the source of the sound, that in the fog some sounds are unreliable; is that a matter of universal knowledge at sea?
 - A. Yes, sir, I would say it is universal knowledge.
- Q. Practically agreed upon by all sea captains so far as you know?
- A. So far as I know, everyone I have ever spoken to about it; it has been my experience.

(Testimony of William Kidston.)

Cross-examination.

Mr. McCLANAHAN.—Q. Captain Kidston, in the evidence taken in this case so far there has been much said on both sides about the point of collision; is it through inadvertence on your part or upon the part of your counsel that you have failed to say anything in your direct examination about the bearings that you took of Pt. Reyes and South End at the time of the collision?

- A. I have not been asked the question.
- Q. I ask you whether that is through inadvertence of yours or your counsel?
 - A. I think it must be of counsel.
- Q. You don't know why he has failed to ask you on that seemingly important question?

Mr. DENMAN.—He has already testified as to the distance.

A. No, sir.

Mr. McCLANAHAN.—Q. He has not talked with you or given [695—574] you any reason as to why he might refrain from asking you questions as to bearings? A. No, sir.

- Q. Do you remember taking the bearings?
- A. Quite well, yes, sir.
- Q. What were they taken for, captain?
- A. To fix my position.
- Q. What did you want to fix your position for?
- A. To return home; to return back to my dock. I wanted to know what departure to take from and what course to steer.

- Q. You did not take the bearings with any idea of fixing the point of collision, did you?
 - A. Not primarily, no.
- Q. Did you have that in mind at all when you took the bearings, placing the point of the collision?
 - A. Well, I might say yes, I did.
- Q. What did you want to place the point of collision for?
- A. To be able to make my report to the Inspectors, as to where the collision occurred.
 - Q. Did you make your report to the Inspectors?
 - A. Yes, sir.
 - Q. Have you got a copy of it with you now?
 - A. No, sir.
 - Q. You did not keep a copy?
 - A. No, sir—oh, yes, I did keep a copy.
 - Q. What did you do with it?
 - A. I guess it must be home.
 - Q. Didn't you ever show it to Mr. Denman?
 - A. Yes, I showed it to Mr. Denman.
 - Q. Has he not got it?
 - A. I think he has a copy of it.
 - Mr. McCLANAHAN.—Please produce it.
- Mr. DENMAN.—It is in the Inspectors' Report there. (Indicating.)
- Mr. McCLANAHAN.—Q. Is that a copy of your Report to the Inspectors, Captain?
- A. Yes, I would say that that is an exact copy of my Report.
- Mr. McCLANAHAN.—I will introduce it in evidence as Libelant's Exhibit 19 and I would like to

(Testimony of William Kidston.) have it copied into this record.

The COMMISSIONER.—That will be marked Libelant's Exhibit No. 19.

(Libelant's Exhibit No. 19 reads as follows:) [696—575]

Libelant's Exhibit No. 19 [Statement].

STATEMENT OF CAPTAIN WM. KIDSTON,
MASTER OF THE STEAMER "BEAVER."

Nov. 25, 1910.

U. S. Local Inspectors of Hulls & Boilers, San Francisco, Cal.

Gentlemen:

At 3:16 P. M. Nov. 22nd, bound from San Francisco to Portland, Pt. Reyes bearing NW.xW.½W., 6 Miles Mag. south end bearing NW.½N. 4 miles, the S. S. "Beaver" was in collision with the Norwegian S. S. "Selja," sinking the latter and doing considerable damage to the S. S. "Beaver's" stem and bow plating forward of collision bulkhead.

The S. S. "Beaver" left Pier 40 at 12:50 P. M. and proceeded to sea going out the North Channel. There was a light fog, but the land and buoys marking the channel, plainly in sight. After getting through the channel, we encountered a very heavy westerly swell, had a good departure from #2 Red Buoy and set our usual course S. 83° W. Bridge Compass. Mag. S. 86° W. to Duxberry Reef Buoy, which we passed ½ miles off at 2:15 P. M. Then altered course to N. 86° W. Bridge Compass (No deviation on this course) which course would take us $2\frac{1}{2}$ miles off Pt. Reyes

at this time, 2:15 P. M. The fog would lift and shut down so that we could only see about 1/2 a mile at times, and continued so until 3:00 P.M., when the fog shut in thick. I then sent written instructions to the Chief Engineer to slow the engine to 76 turns per minute. Our automatic fog whistle was blowing its usual blast of 5 seconds every minute; the lookout had been doubled. [697—576] On the bridge with myself was the Second Officer and a Quartermaster. I had stepped off the bridge for a minute to the toilet, which is at the foot of the bridge ladder. When I returned to the bridge the Second Officer reported that he had just heard a steamer's whistle a point on our starboard bow. I ordered the helm to starboard, thinking that I was overtaking a steamer on the same course or some steamer bound down for the North Channel. Our automatic whistle blew just then, and after it stopped, I heard the "Selja" whistle, and it sounded about a point on our starboard bow, although our head had swung a half point to port more than when we first heard her whistle. I then telegraphed to stop the engine and full speed astern. This was at 3:15 P. M., I ordered the helm hard-aport and blew three whistles. Although I had not seen the steamer, I made up my mind that she was crossing our bow, and with the helm hard-a-port and backing full speed, I was trying to stop the ship's headway, or get her head cantered enough to starboard to pass around her stern.

A few seconds later we sighted the S. S. "Selja" about two ship's lengths ahead and a little on our starboard bow, and heading right across our bow. It

was after we sighted the "Selja" that she answered our three whistles.

I saw that there was great danger of a collision and ordered the Second Officer to ring the telegraph two or three times for full speed astern; this was to notify the engineer that I wanted all the power he had to back. Our head was swinging very fast to starboard and I thought we were [698-577] going to swing clear, but just as we had lost our headway, but had not gathered any sternboard, the "Selja" being in the trough of the swell and our head pointing just forward of his midships, she was lifted on a big swell and carried hard against our stem, and as the "Beaver" came down with the swell she crashed through the side of the "Selja," going into her about 10 or 12 feet. This was at 3:16 P. M. I stopped the engines, thinking to keep the "Beaver" in the hole, but she gathered sternway and backed away from the other steamer. I saw that the "Selja" was doomed and sounded the crew to Boat Stations. Boats were all cleared away and two lowered and sent rescue the crew of the "Selja." Bilges were sounded and forepeak examined, found that ship was not making any water. The S. S. "Selja" sank head first in ten minutes from the time she was struck. She sank in 30 fathoms of water, and when her bow struck the bottom, she was almost straight on end with her stern sticking out of water about 100 feet. Then she gradually turned bottom up and sank. We rescued the captain's wife and two children and all the crew except two Chinese.

Our boats searched around after the "Selja" sank,

not finding the missing Chinese. I ordered the boats back to the "Beaver," had them hoisted on board and proceeded back to San Francisco, arriving at Pier 40—6:30 P. M.

Yours respectfully,
(Signed) WM. KIDSTON,
Master S. S. "Beaver."

Subscribed and sworn to before me, O. F. Bolles, U. S. Local Inspector, at San Francisco, Cal., this 25 day of Nov., 1910. [699—578]

Mr. McCLANAHAN.—Q. By "Inspectors" you mean the United States Inspectors?

- A. Yes, sir, the United States Inspectors of Hulls and Boilers.
 - Q. Messrs. Bolles and Bulger? A. Yes, sir.
 - Q. What is their jurisdiction over you?
- A. They hold all jurisdiction over me regarding any accident that may occur, whether I was in the right or wrong; they have the right to revoke or to suspend my license.
- Q. So that you felt, at the time of the collision, that there would be an investigation by these gentlemen and the blame fixed by them, so far as you were concerned?
- A. I was sure of it. I am compelled by law to report to them.
 - Q. And this report has to be sworn to?
 - A. Yes, sir.
 - Q. And you swore to it, did you? A. Yes, sir.
 - Q. And it is a truthful report of the matters set

(Testimony of William Kidston.) forth therein? A. Just as I saw it.

- Q. I believe I handed you that report just a minute ago, or a copy of it; you read it through, did you?
 - A. I did, I read it through.
 - Q. And it is correct? A. Yes, it is correct.
 - Q. You don't care to make any changes in it?
 - A. None whatever.
- Q. What time, Captain, did you take your bearings referred to in the Report as the point of collision?
- A. About 10 minutes after the collision, 10 or 15 minutes after the collision.
- Q. That was before the "Selja" had sunk, was it not? A. She was about going down then.
- Q. And you stopped at that time when the "Selja" was going down, to take the bearings for the purpose of making out a [700—579] Report or a statement to the inspectors?
- A. The "Selja" had sunk head first. Her stern had not disappeared. It was after I had spoken through the megaphone to one of our boats to go around the stern of the "Selja" and pick up some men I saw swimming on the other side of the "Selja"—the officer in charge of the boat said he was afraid to go around the stern of the boat for fear he would be sucked down by the suction; I told him there would be no suction, for him to go around the stern as close as he could so as to get these men before they would be exhausted. Then I went around to the compass, I saw the fog had cleared and I took the

bearings; as near as I can place that in my mind it was about between 10 and 15 minutes after the collision.

- Q. You did not figure out the distance at the time that you were from Pt. Reyes or from South End?
 - A. No, sir.
 - Q. You saw Pt. Reyes clearly, did you?
- A. Yes, I could see the lower point; the fog did not lift high enough for me to see the lighthouse on top, but I could see the lower point.
- Q. At the time you took the bearings, what way was your vessel heading?
- A. She was heading with the swell, a little on her port bow, so that would make her probably a little north of west that she was heading at that time.
 - Q. How did you get in that position?
 - A. I could not tell you how she got in that position.
- Q. Do you mean to say that after the collision the swell was striking the port side of your ship?
 - A. The port bow.
 - Q. The port bow, after the collision?
 - A. Yes, sir, after the collision.
- Q. Immediately after—after you had backed away from the "Selja"? [701—580]
- A. After we had backed away from the "Selja" the swell was striking us pretty near forward of the beam.
 - Q. What beam? A. The port beam.
- Q. Which way was the "Selja" headed at that time?

- A. At the time when she was sinking, right into the swell.
- Q. No, not at the time she was sinking, but at the time you backed away from her?
- A. She was pretty near into the swell then, pretty near head into the swell.
 - Q. So that her stern was at your port beam?
 - A. No, I did not say so.
- Q. If the swell were striking your port beam and the "Selja" was headed into the swell, her bow would be away from you, would it not, and her stern pointed toward your port beam? A. No, sir.
- Q. Well, what was the situation? Which way was her bow pointing with reference to the way you were lying? I prefer not to have you use the models, Captain, because that cannot go into the record.
- A. Well, I was only going to do that so as to make it plainer to you.
- Q. You can use the models and make it plain in English as well.
 - A. If the swell were here you—
- Q. (Intg.) You see, Captain, we cannot get "here" into the record. The swell was striking—
- A. (Intg.) The swell was striking a little forward of the port beam of the "Beaver" and the "Selja" was heading about into the swell. Now, that is as plain as I can make it to you, unless I can demonstrate it to you.
- Q. Was that the location of the boats after you had made your maneuver and backed away from the "Selja"?

San Francisco & Portland Steamship Co. 827 (Testimony of William Kidston.)

- A. We backed straight away from the "Selja."
- Q. And then didn't you swing?
- A. Yes, we swung after a [702—581] little while but not right away.
 - Q. After a little while which way did you swing?
 - A. We commenced to swing to port.
 - Q. To swing to port? A. To swing to port.
 - Q. That is, your bow began to swing to port?
 - A. Our bow began to swing to port.
- Q. I want to read you from this report, which you have verified—made to the inspectors. You say that after getting through the channel—I suppose you refer there to the North Channel?
 - A. Yes, sir.
- Q. You say "We encountered a very heavy westerly swell, had a good departure from No. 2 Red Buoy and set our usual course south 83 degrees west, bridge compass, magnetic south 86 degrees west to Duxbery Reef." Is that correct? A. No, sir.
 - Q. What is that?
 - A. No, sir, that Report does not read that way.
- Q. Read it over, Captain, and see if it does not read that way (handing to witness Libelant's Exhibit 19.)
- A. "We encountered a very heavy swell—westerly swell; had a good departure from No. 2 Red Buoy and set our course south"—
 - Q. Is not the word "usual" there?
- A. "And set our usual course south 83 degrees west, bridge compass." That is correct.
 - Q. Go on.

- A. "Magnetic south 86 degrees west to Duxbury Reef Buoy." There is a misprint there; I acknowledge that.
- Q. What is a misprint? You mean that your Report is wrong, don't you? There is no misprint, is there? [703—582]
- A. Well, there is no occasion for that south 86, because south 83 degrees west, bridge compass, is magnetic. I did not notice that in there before. That was intended for north 86 west from Duxbury.
- Q. Then, if you will follow your Report a little later on you say: "Then altered course to north 86 west, bridge compass."
 - A. From Duxbury, that is correct.
 - Q. But what about the south 86 west?
 - A. That never was steered.
 - Q. And your Report is wrong in that respect?
- A. In that respect, south 86. We did alter one degree, we steered south 83 and then south 82 before we got to Duxbury.
- Q. Now, are you sure you steered south 83 and then south 82? A. Yes, sir.
 - Q. But you never steered south 86 west magnetic?
 - A. No, we never steered south 86 west magnetic.
 - Q. In that respect then, your Report is wrong?
- A. In that respect it is wrong. I don't know how that crept in there; I never noticed that before.
 - Q. When did you draught this report?
 - A. The day after we arrived.
 - Q. That would be the 23d?
 - A. That would be the 23d.

- Q. Now, you say in your Report that you passed Duxbury at 2:15, half a mile off. Did you see Duxbury? A. I did not.
 - Q. Did you hear it? A. Yes, I heard the buoy.
- Q. What made you say it was half a mile off, could you tell its distance?
- A. Well, I said that from our usual courses steered on that particular run of seven miles and hearing the whistle so plainly, as I heard it I judged it was half a mile off. [704—583]
- Q. So you did place some reliability in your ability to judge of the whistle of a bearing in the fog, did you not?
- A. Well, I had been over that course so often, that is the reason I placed that reliance in it, and I heard that whistle so often, that that is why I judged where we were.
- Q. You say that this subsequent course of north 86 west, bridge compass, no deviation, would take the "Beaver" $2\frac{1}{2}$ miles off Pt. Reyes?
 - A. That is where she should run, yes, sir.
 - Q. That is correct, is it?
 - A. Yes, sir, that is what that should have done.
- Q. Do you remember testifying before the Inspectors in regard to the matter of where your course would take you off Pt. Reyes? If not, let me refresh your memory.
- Mr. DENMAN.—Whereabouts is it in that testimony, Mr. McClanahan?
- Mr. McCLANAHAN.—I cannot tell you, I have only an excerpt.

- Q. Do you remember this question being asked you by the Inspectors:
 - "Q. Did you know when you were taking Pt. Reyes in line with Duxbury Reef how far off shore you were?
 - A. Quite a distance off South Point; we would be 3 miles—3 miles and a half.
 - Q. How much would that be in line with Pt. Reyes to the Heads—North Heads?
 - A. It would be over a mile and a half off the land that is on that line.
 - Q. In a straight line you would be a mile and a half off Pt. Reyes at the time of the collision? A. Yes, sir.'

Do you remember that tesitmony? A. Yes.

- Q. Is there any conflict between that testimony and the Report which you made where you said Pt. Reyes would be $2\frac{1}{2}$ miles [705—584] on that course?
- A. If the answers to the questions are there as I gave them it was a wrong impression that I had. I distinctly remember the Inspector putting that question to me. What I understood by that question was what would be the closest land to be on that course until I got to Pt. Reyes.
- Q. The question is as follows: "Q. In a straight line you would be a mile and a half off Pt. Reyes at the time of the collision? A. Yes, sir."
 - A. Oh, I never said such a thing in my life.
 - Q. You never said such a thing?

A. No, I never said such a thing; if I did I never meant that.

Q. Don't let us be too positive, Captain. This question, taking it in conjunction with the context, I believe means that if your course line had been extended, that its extension would be a mile and a half off Pt. Reyes; is that what you now say is incorrect?

A. No, not at all; if my course had been extended I meant we would be $2\frac{1}{2}$ miles off Pt. Reyes when Pt. Reyes would be abeam.

- Q. And you deny that you said that in a straight line you would be a mile and a half off Pt. Reyes at the time of the collision—is that what you deny?
 - A. I never meant anything of the kind.
- Q. Have you since platted that course of north 86 west, bridge compass, no deviation, to see whether its continuance would bring you 2½ miles off Pt. Reyes?
 - A. I have.
 - Q. And your statement is confirmed, is it?
 - A. Yes, sir.
- Q. Did you plat it before you made the statement, the sworn statement to the inspectors?
- A. Well, at that time I had platted it when I set the course for that distance.
- Q. That is when you set the course north 86 west? [706—585]
- A. North 86 west. I had laid the course on the chart and I knew that is where it would bring her off.
 - Q. At the time, on the ship?
 - A. At the time, on the ship.
 - Q. I want to now examine you, Captain, on the

question of the conversation you say you had with Captain Lie on the bridge. I want to be perfectly fair with you so that you may know what you are saying in answer to my questions. I first want to ask you whether you are familiar with what may be called the two whistle rule when a vessel is dead or done in the water?

A. I know what the rule is.

- Q. What article is that to be found in of the International Rules?
- A. I cannot tell you the number of the article. I know what the rule is.
- Q. You also know what the other rule is with reference to fog-signals? A. Yes, sir.
 - Q. What article is that to be found in?
- A. I cannot tell you what the number of the article is.
- Q. I understand that Captain Lie told you that he had been at a standstill in the trough of the sea for more than 10 minutes; is that a correct statement of what he said?
- A. At a standstill in the trough of the sea for more than 10 minutes; that is correct.
- Q. You believe Captain Lie to be an efficient seaman, do you not?
 - A. I have no way of judging Captain Lie.
- Q. You have no way of judging him. When you speak of your vessel stopped in the water, what do you say about it, how do you characterize that situation?
- A. The ship's headway is stopped and she is lying dead in the water.

- Q. Is that it?
- A. She is stopped in the water. [707—586]
- Q. And dead in the water? A. Yes, sir.
- Q. Any other expression? No way on her?
- A. Well, she would not be stopped, in my estimation, if she had any way on her, either ahead or astern.
- Q. Yes, I know that; I am suggesting to you characteristics of that situation; she would have no way on her?

 A. She would have no way on her.
 - Q. She would be at rest?
- A. No, she might not be at rest, she might be rolling or she might be pitching.
- Q. If she were rolling or pitching would you say that the two-whistle rule applied if she had no way on her?

 A. You bet I would.
- Q. So you would characterize that situation by that expression, would you not, that she was at rest in the water, she had no way on her?
 - A. I would not say "rest"?
 - Q. You would not say "rest"? A. No.
 - Q. Why not?
- A. Because that is a term I would not think of making use of. I never have heard it made use of.
- Q. What are the terms you would make use of, if you wanted to characterize the situation?
 - A. That I was dead, stopped, no headway on.
- Q. Just those two terms—no, those three terms, "dead, stopped, no headway"?
- A. That I was dead, stopped, and without any headway.

- Q. Dead, stopped, and without any headway?
- A. Yes, sir.
- Q. What is the expression which the rule uses?
- A. Generally stopped, without any headway; that is the general expression.
 - Q. I am speaking of the rule itself?
 - A. Oh, in the article?
- Q. Yes, in the article—what is the expression used there to [708—587] characterize the situation?
- A. When your engines are stopped and the ship has no headway—without headway—as near as I can remember; engines stopped and the ship without any headway.
 - Q. That is your remembrance of the rule?
 - A. That is my remembrance.
- Q. Did you ever hear or see a master characterize that situation by the use of the word "standstill"?
- A. Oh, very often; very often I have heard that used.
 - Q. And yet you would not use it?
 - A. I might, on occasions; I don't know; I might.
- Q. Captain, have I wasted all this time trying to get from you what you would use and now you say you might use something else?
 - A. I don't think you put it to me that way.
 - Q. Well, then, I am at fault; I tried to, did I not?
 - A. I don't think so.
- Q. As a seafaring man you might use the word "standstill"? A. I might, yes, sir.
- Q. Do you remember clearly the evidence at the hearing before the inspector?

- A. I think I do; I would not be positive.
- Q. Do you remember that Captain Lie was there?
- A. I do.
- Q. When Captain Lie was on the bridge and told you that he had been at a standstill for more than 10 minutes, he was then in your opinion convicting himself of a great fault for not blowing two whistles, was he not? A. He was.
- Q. Because if he had blown two whistles your conduct might have been different? A. Entirely. [709—588]
- Q. I do not remember that you referred to this fault of Captain Lie's, when he stated it to you?
 - A. No, sir.
 - Q. Why not?
- A. Well, Captain Lie had just lost his ship, Mr. McClanahan, and he was feeling pretty bad and pretty nervous over it; I knew that it was a great fault and I didn't wish to make him feel any worse than he was, and rub it in on him at all. That is one reason why I did not refer to it.
- Q. So you did not say to him, "you ought to have blown two whistles" because out of sympathy for him you felt that it might hurt his feelings?
- A. Well, I didn't care to be telling him where I thought he was wrong; I was not his judge.
- Q. Subsequently, Captain Kidston, you were in a way put on trial, were you not?
- A. I don't quite understand your question; do you mean the investigation before the inspectors?
 - Q. Yes.

- A. I don't know whether I would call that a trial, it was an investigation.
- Q. You were the only man interested personally in that investigation?
 - A. So far as the inspectors were concerned, yes sir.
 - Q. And it meant perhaps the loss of your license?
 - A. It might.
- Q. So that that investigation was a matter of very great personal interest to you?
 - A. It certainly was.
- Q. In ascertaining where the fault, if any, for that collision lay; that was the purpose, was it not?
- A. No, the investigation of the inspectors was solely to find out what I had done. They never asked me any question about the other man. It was to find out if I had complied with the regulations called for in the navigation of a ship in a fog. [710—589]
- Q. So that the question of whether you ran down the "Selja" and sunk her through the fault of the master of the "Selja" you don't think was under investigation at that hearing?
- A. There never was any question about that asked me.
 - Q. That it was not?
- A. They never asked me anything about the other captain.
- Q. If it had been shown that the other master was grossly at fault you would have been exonerated, would you not? A. I was exonerated.
 - Q. Answer my question. A. I presume so.
 - Q. Do you remember that at that hearing Captain

Lie had read in your presence his log signed by himself and sworn to by himself?

Mr. DENMAN.—Where does that appear in the record, that he read it?

Mr. McCLANAHAN.—I say had it read.

Mr. DENMAN.—Does that appear in the record?

Mr. McCLANAHAN.—Yes.

Mr. DENMAN.—Where does it appear?

Mr. McCLANAHAN.—Q. Well, whether it appears in the record, or not, do you remember that that was done?

A. I remember there was a paper read purporting to be a copy of his log.

Q. And that paper is in evidence in this case, is it not, or do you know?

A. I don't know; I have never seen it.

Q. Before proceeding with this matter of the hearing I would like to ask you another question: did you, when Captain Lie told you that he had been dead in the water for more than 10 minutes, believe him? [711—590]

A. That he had been stopped dead in the water for over 10 minutes, I certainly did believe him.

Q. You certainly did believe him? A. Yes.

Q. In spite of the fact that just immediately prior to the collision the maneuvers of your vessel had shown to you—not the maneuvers but the whistle of the "Selja" had shown to you, as you believed, that she was moving ahead?

Mr. DENMAN.—I don't think there is any testimony to that effect.

A. One whistle signified to me that she was under way.

Mr. McCLANAHAN.—Q. And that was a point on the starboard bow?

- A. That is what was reported to me.
- Q. And the next whistle was still a point on the starboard bow, although your head had swung one-half point to port? A. Yes, sir.
 - Q. What did that indicate?
- A. That indicated that the bearing could not have been correct, and I did not know whether, when I heard the one whistle myself—I did not know whether he was coming down parallel with me, or not, but that he was very close and that he was under way; it sounded so close to me that my only object then was to try to get the headway off the ship.
- Q. So the second whistle conveyed to you the idea that he was under way?
 - A. That he was under way.
- Q. Did you attempt to reconcile Captain Lie's statement that he was at a standstill in the water for 10 minutes with your prior belief that he was under way as ascertained from the whistle you heard?
- A. No, but from the condition that I saw him in when he came out of the fog—
- Q. (Intg.) Just answer the question, Captain. Read it to him. [712—591]

(Question read by the Reporter.)

- A. No, not by that.
- Q. They were irreconcilable, those two statements?
- A. Yes.

- Q. And you did not call his attention to that?
- A. No.
- Q. When you testified before the inspectors did you still believe Captain Lie's statement that he was at a standstill 10 minutes before the collision?
 - A. I did.
- Q. You were asked this question by one of the inspectors, were you not:
 - "Q. Did she"—referring to the "Selja"—
 "appear to have any way on her, the other ship?
 - A. That I could not judge very well. Our head was swung to starboard so fast that I could not tell whether the other ship had any headway or not."

And then in another place, as follows;

- "Q. You think if the 'Selja' had headway and continued on her course, you would have gone clear of her?
- A. Yes, I would have done what I started to do, go around her stern.
- Q. Did you think that she was under headway? A. I did.
 - Q. What signals did you get from the 'Selja'?
 - A. One blast, that she was under headway.
 - Q. You understood it that way? A. I did.
 - Q. You figured she was across your bow?
- A. After my head had swung that half point I then knew that she must be crossing my bow."

Why, didn't you, when you had the opportunity in that line of examination, refer to this conversation with Captain Lie on the bridge?

- A. Well, there were no questions asked me, Mr. McClanahan, that would bring that answer out from me. [713—592]
- Q. The very matter in controversy was there referred to, that is, the headway of the "Selja" and yet you refrained from saying anything about your belief based on Captain Lie's statement that she was at a standstill for more than 10 minutes?
 - A. That is correct, I did not.
 - Q. Why didn't you?
- A. I have given you the reason, because the question was never asked me.
- Q. Were you still solicitous for the unfortunate captain?
- A. No, I was not at all, I was thinking more of myself at that time.
- Q. Would it not have been entirely appropriate for you at that time, when you were asked as to the headway the "Selja" had on, for you to have said that she was dead in the water, or at a standstill for more than 10 minutes, according to Captain Lie's statement to you? A. It might have been.
- Q. What is your reason for refraining from making that statement?
- A. I have answered you, Mr. McClanahan, because the question was not asked me.
- Q. Very well, we will drop it right there. You remember this evidence that I have read to you, do you not?
 - A. Yes, I partially remember that evidence.
 - Q. Captain Kidston, you also know that Captain

Lie was put under oath and examined at that hearing, do you not? A. Yes, sir.

- Q. Did you hear Captain Lie make these answers to these questions:
 - "Q. Were you stopped when you heard the whistle of the other ship?
 - A. Just stopped. I saw 'Beaver' as he blowed three whistles. Could just loom him. I could not make out way he was heading.
 - Q. How long had you been stopped [714—593] when you heard the whistle of the 'Beaver'? A. 5 minutes.
 - Q. Was your ship dead in the water at that time?
 - A. I was looking over the side. She had a little headway. The sea was astern and she had headway and I did not want to blow two whistles before she was done.
 - Q. She still had a little way on?
 - A. Yes, sir. Nothing to speak of. I was just on the moment of blowing two whistles when he loomed up.
 - Q. If you were stopped 5 minutes why didn't you blow two whistles?
 - A. Because she was going ahead yet.
 - Q. When the engines are stopped, does the law say you shall blow two whistles? A. No.
 - Q. Your vessel is practically stopped at that time?
 - A. No, as soon as my vessel has headway I cannot blow two whistles.

- Q. Your engines were stopped 5 minutes and you still had headway on the ship?
 - A. Yes, sir.
- Q. How fast were you going through the water?
- A. 3 or 4 knots. She would not slow herself in 5 minutes. She will only swing around, a tramp like that. Her power astern is not full enough.
- Q. You did not consider it necessary to blow two whistles that your engines were stopped?
- A. I just told the Third Officer to hold on the two whistles until I told him.
 - Q. Was she on the point of stopping?
- A. As I said before, when I blowed three whistles I was then at the point of blowing two whistles to show that I had stopped; then the steamer loomed up and she blowed three whistles at same moment, then I backed engines and blowed three whistles.
- Q. Why didn't you back when you heard the vessel approaching? [715—594]
- A. Because I was still—I was just moving a little. Too, I was navigating as carefully as I could because I did not want to alter my course on a whistle. I never alter my course on a fog whistle. I would sooner stop my vessel. I could see three ship-lengths. I was quite certain I could stop my vessel before the other would run into me, if she was in same speed.
 - Q. Do you think if you had blowed those two

whistles when you stopped it would have avoided the collision?

A. I don't know.

- Q. How many whistles did you hear on the 'Beaver'?
- A. I heard nearly 15. I heard whistle of 'Beaver' at 3 o'clock.
 - Q. How long after that did you stop?
 - A. I stopped 10 minutes later.
- Q. When you heard that whistle, if you had given two whistles that you were stopped, do you think the collision would have been averted?
- A. I don't know, because I could not blow two whistles.
 - Q. You could blow your fog-signals?
 - A. Yes, sir.
- Q. When you blow fog-signals you are under way? A. Yes, sir.
- Q. When you blow two whistles you are stopped? A. Yes, sir.
- Q. When you blow two whistles your ship is stopped through the water?
- A. Yes, sir. That means the ship is done in the water.
- Q. How long would she run after your engines were stopped?
- A. About 5 minutes. I was going to blow three whistles. I gave three to back her. She was stopped at the moment I gave three whistles.
- Q. When you stop your engines dead still, you are virtually stopped?
 - A. We are not allowed to blow as soon as we

stop our engines. We may be going 15 or 20 knots."

Do you remember that testimony?

- A. Partially; I cannot remember all the testimony.
- Q. Practically though it refreshes your mind? [716—595]
 - A. There is a good deal of it there that I remember.
- Q. Now, hearing that testimony, you knew that it was in direct conflict with the conversation or the statement made to you on the bridge by Captain Lie, and in direct conflict with your belief in the truth of that statement, did you not?
- A. I knew it was in conflict with what he told me, yes, sir.
- Q. Why did you not refer the matter to your attorney, who was then present looking after your interests? A. I did not.
- Q. You did not, and you have no reason now to give why you did not?
- A. I have already given you the reason, that I was not asked the question to bring that answer out.
- Q. We have passed your examination, Captain, and are now on the examination of Captain Lie—in a measure your opponent at the hearing; why did you not refer this discrepancy, which you knew to exist, to your then attorney sitting by your side at the hearing?

Mr. DENMAN.—Where does it appear that he is the opponent?

Mr. McCLANAHAN.—Oh, that was facetious? A. Well, I did not, that is all.

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Q. And you have no reason to give for not doing so?

Mr. DENMAN.—He has given his reasons three or four times.

A. The only reason is—you have asked me why I did not say something to Captain Lie about it at the time and I have given my reason for it at that time; the next time is when it was brought out at the hearing, I didn't say anything about it because I was not asked any question.

Mr. McCLANAHAN.—Q. Now, the third time when you heard Captain Lie make a flat contradiction of what you say he said on the stand, what was your reason for not calling your attorney's attention to it so that he might bring it out at [717—596] the hearing. Of course, Captain, you may not have any reason, and if you have not say so; and if you have any reason I want to know what it was.

A. I was being tried or investigated by the inspectors for my actions, not for Captain Lie's. They never asked me any question in regard to Captain Lie and it never came out.

- Q. And that is your reason?
- A. That is my reason.
- Q. You heard also the Third Officer of the "Selja" testify at that hearing, did you not?
- A. One of the officers, I think he was the Third Officer.
 - Q. Do you remember his testimony as follows:
 - "Q. Was your vessel stopped before the collision?

- A. Yes, sir, it was dead slow. Asked captain if I should give two whistles but captain said he is going little ahead because there was heavy swell from astern.
 - Q. She was forging through the water?
- A. She was moving little ahead. I asked captain if I should blow two whistles; he said no, as she had way on.
- Q. How long time was it from the time your ship stopped her engines until the collision occurred?
- A. It was stopped about 3:10. Collision occurred at 3:15 or 3:16.
- Q. What speed was 'Selja' going when engines stopped?
 - A. Not very much. She was dead slow.
 - Q. How many knots would that be?
 - A. I should judge 3 or 4."

Do you remember that evidence?

- A. Well, it is the same as the captain's; I remember portions of it.
- Q. Have you any reason for not referring the discrepancy as disclosed by that evidence to your attorney?
- A. I have not, any more than I have said. [718—597]
- Q. Your attorney at that time was Mr. William Denman? A. He was the attorney.
 - Q. He was your attorney at that hearing?
 - A. He was.
 - Q. And he is the same William Denman who repre-

sents the claimant in this case? A. He is.

- Q. I suppose, Captain, that most of the facts pertaining to the collision were furnished by you to the claimant's proctors?
 - A. The principal facts, I imagine.
- Q. You understand that this case is not a case in which you alone are interested, but it is one in which both parties are interested, in placing the fault for this collision; you understand that, do you not?
 - A. Yes, sir.
- Q. Did you furnish most of the facts with reference to the collision found in the answer filed in this case? A. I do not know.

Mr. DENMAN.—There is no evidence here showing that the Captain has ever seen the answer.

Mr. McCLANAHAN.—Well, we can show him a copy of it if he wants to see it.

- A. That is what I was going to say, that I never saw it and don't know anything about it.
- Q. Well, if you have any curiosity in that regard we will gratify it now; I will show you the answer. Of course, you could not testify that you furnished the facts unless you saw what the facts are that are set out in the answer. Take time to read the answer, Captain, so that we will see that you are perfectly familiar with the facts contained in it. (Handing.) You are reading the wrong answer, Captain; you have just now read, Captain Kidston, the answer of the San Francisco & Portland Steamship Company, respondents, in the suit brought [719—598] against it by the Portland & Asiatic Steamship Com-

(Testimony of William Kidston.)
pany, the Libelant, for freight?

A. Yes, sir.

- Q. Will you please now read the answer in the original suit brought by Olaf Lie vs. The Steamship "Beaver"? You have read that answer, have you, Captain? A. I have read it.
- Q. You note in there that it is alleged that the "Selja" was allowed to stop in the water for many minutes, as claimant is informed and believes, and therefore alleges at least 5 minutes. You noticed that allegation, did you?
 - A. Yes, I think I remember seeing that.
- Q. Where did that allegation come from—the fact upon which it is based?
- A. I don't know. It might have come from me or from one of the other officers or crew of the ship. I don't know where it came from.
 - Q. What is it based on, do you know?
- A. It may have been based on something I told Mr. Denman; I don't know what it is based on.
- Q. You know what I am trying to get from you, Captain—is it based on the conversation that you had with Captain Lie on the bridge? A. Oh, oh—

Mr. DENMAN.—I object to the question because it calls for the opinion of the witness; there is no evidence at all that he knows anything at all about the drawing of the answer.

Mr. McCLANAHAN.—Q. Answer the question, Captain.

- A. This paper that I have just read here, this is the first time I have ever seen it.
 - Q. Well, you have read it, and you know the facts

stated in the paper. Now, I have stated one of the facts, and now I ask if that fact is based on your understanding of the conversation held on the bridge? [720—599]

Mr. DENMAN.—Objected to as calling for the opinion of the witness as to what their pleading was based on, he having had nothing to do with the drawing of it.

Mr. McCLANAHAN.—Answer the question, Captain. A. I don't know.

- Q. You don't know where that came from, that 5-minute reference to the "Selja" being stopped?
- A. So far as this statement is concerned, I don't know where it came from.
- Q. A 5-minute stoppage of the "Selja" prior to the collision is something that you know nothing about?
 - A. Something I have heard.
 - Q. From whom?
- A. From Captain Lie, I think, in his testimony before the inspectors, I think, if I am not mistaken. Didn't he say that before the inspectors?
- Q. He said before the inspectors, and I am not attempting to quote his words, that his engines were stopped at 3:10; that would be 5 minutes before the collision? A. Yes.

Mr. DENMAN.—I object to that, because it does not show the whole of what he said before the inspectors. He put in his log there showing that he had stopped still for 5 minutes. If you are going to summarize statements made before the Inspectors, Mr. McClanahan, I submit that you must have the

(Testimony of William Kidston.) whole of them go in.

Mr. McCLANAHAN.—The whole of what?

Mr. DENMAN.—The whole of his statements. For instance, he stated in his log that he handed into the inspectors that he was standing almost dead still for at least 5 minutes.

Mr. McCLANAHAN.—Q. I am referring to the allegation in the answer that the "Selja" was at a dead stop in the water [721—600] for at least 5 minutes before the collision; now, Captain Lie did not make any such statement as that before the inspectors. Do you know of any other place where you heard that 5-minute suggestion?

- A. No, not when you put the question that way. I don't know anything about any 5 minutes dead stop.
 - Q. You don't know anything about it?
 - A. Not about any five minutes dead stop.
- Q. You don't know of any source where that might have been obtained?
 - A. I don't know where it was obtained.
- Q. Did you ever tell Mr. Denman about this conversation on the bridge? A. Yes, sir, I did.
- Q. And didn't you tell him that portion of it where Captain Lie is said to have said that he had been dead in the water for more than 10 minutes?
- A. For more than 10 minutes, yes; not 5, but for more than 10.
 - Q. For more than 10 minutes? A. Yes, sir.
- Q. Were you cognizant of the fact that some of the officers of the "Selja" were to have their depositions taken preparatory to departing for Norway?

San Francisco & Portland Steamship Co. 851 (Testimony of William Kidston.)

- A. I don't think I knew anything about it until after the depositions were taken. I don't remember.
 - Q. You were in the city, were you?
 - A. I was in the city.
- Q. Had you conferences with Mr. Denman prior to the depositions of the officers of the "Selja" being taken?

Mr. DENMAN.—Do you some specific conference, Mr. McClanahan?

- A. I had not had any conference with Mr. Denman from about the time of the investigation before the inspectors until along after the middle of May, I think it was. I never was to his office more than once or twice before that, I don't think. [722—601]
- Q. Did you, at the conference first referred to, namely, the one approximately near the time of the inspectors' hearing, did you then tell him the facts of the collision as you understood them?
 - A. I think I did.
- Q. And you think you told him, of course, about this important conversation on the bridge?
 - A. I think I did.
- Q. Well, now, take my word for it, Captain Kidston; at this hearing at which the depositions of the officers of the "Selja" were taken there was introduced the engineer's log showing the bells received in the engine-room, and the maneuvers of the engines; and there was testimony given by each of the officers of the "Selja," and cross-examination or opportunity for cross-examination, and yet not one word was suggested about this 10 minute or more stoppage of the

- "Selja" before the collision; do you know why that was omitted at that time? A. I do not.
 - Q. You have no reason for it?
 - A. None whatever.
- Q. And you don't know why your counsel omitted it? A. I do not.
- Q. Coming back to the day of the collision, I will ask you whether there was any fog at the time you left the port of San Francisco?
 - A. A light haze, a high, light haze.
- Q. You were not blowing your whistle inside the harbor? A. No.
 - Q. What time did you leave your dock?
 - A. I think it was about 12:50 P. M.
 - Q. Is that your regular time for leaving?
 - A. No; 12 o'clock is our regular time.
 - Q. You were late that day, were you?
 - A. We were late.
 - Q. 50 minutes late?
 - A. About that. [723—602]
- Q. You have a regular schedule, have you not, Captain, to make with reference to time? You leave here at a certain time and are supposed to be due at Portland at a certain hour? A. No, sir.
- Q. Have you no instructions at all from your owners as to that run, with reference to time?
 - A. No, not with reference to time.
- Q. Have you any instructions with reference to speed?
 - A. None from San Francisco to Portland.
- Q. Have you any instructions with reference to course?

- A. None with the exception of distance off of headlands, that is all.
- Q. What do you mean by distance off of the headlands, how far you shall approach headland?
 - A. Yes, sir.
- Q. Nothing with reference to how near you shall run to the shore?
 - A. I have just said, with reference to headlands.
 - Q. And only with reference to headlands?
 - A. Yes, sir.
- Q. No instruction with reference to any other portion than headlands? A. Points.
 - Q. What is that instruction?
- A. That we must not come within a certain distance of certain points which are considered dangerous.
- Q. You are at liberty, then, to shape your course otherwise as you deem best? A. Yes, sir.
- Q. When did you first, on November 22d blow your fog-whistle?
- A. I cannot remember; previous to getting to Duxbury Reef.
- Q. Did you not blow it while you were in the North Channel?
- A. Not at all. It was quite clear in the North Channel, except, as I say, a haze.
- Q. But before you got to Duxbury Reef you began to blow your fog-whistle? [724—603]
 - A. We began to blow it then.
- Q. At that time how far could you see through the fog, when you first started your whistle?

- A. At times, a mile.
- Q. Did you see that vessel?
- A. No, we did not see that vessel. She was well off on our port beam.
 - Q. What was the next vessel you heard the whistle of?

 A. The next was a steam-trawler.
 - Q. Where did you hear that whistle?
- A. That was forward of our starboard beam. [726—605]
 - Q. Forward of the starboard beam?
 - A. Yes, sir.
 - Q. How much forward?
- A. Oh, I could not say, probably a point or two forward, if I remember right.
 - Q. Did you hear more than one of her whistles?
- A. Yes, we heard several of her whistles, and we saw her also.
 - Q. She passed abeam? A. She passed abeam.
 - Q. When did you first see her?
 - A. Just forward of abeam.
 - Q. I say, when did you first see her?
 - A. You mean what time?
 - Q. Yes.
 - A. I don't know; I did not keep the time of that.
- Q. With reference to the whistles, when did you first see her? A. With reference to her whistles?
 - Q. Yes.
- A. Just about the time she blew her first whistle we saw her.
 - Q. You saw her just about the time she blew it?
 - A. Just after she blew her first whistle we saw her.

Q. And before she blew her second?

A. Well, I don't know how many she had blown, but it was her second that we heard.

Q. How great was the interval between the first whistle you heard and the second?

A. I don't remember now how great an interval there was, maybe two minutes.

Q. They were fog-signals, were they?

A. They were regular fog-signals.

Q. You were blowing your whistle at the time?

A. We were blowing our whistle regularly every minute, an automatic whistle.

Q. And that second vessel, the trawler, was first heard a little forward of your starboard beam?

A. Of our starboard beam, yes, but a good distance from us. We could just see her, and we could see about a mile at that [727—606] time when she hove up.

Q. Was she about a mile from you when you first saw her? A. Yes, sir.

Q. And did not get any nearer?

A. No, I don't think she got any nearer. She was on a parallel course.

Q. Did you hear any other vessels?

A. Yes, we heard another, but it was a long way inside of us; it was about abeam we picked that up.

Q. And on which side?

A. On the starboard.

Q. You did not see that vessel?

A. The lookout man reported he had seen it.

Q. But you did not see it? A. No, I did not.

don't know that it shows, but it suggests that at 3 o'clock you wrote out a written order to the Chief Engineer with relation to the turns the engines were to make; do you remember that order?

A. Yes, sir.

- Q. Where were you when you wrote the order?
- A. In my room.
- Q. That was at 3 o'clock? A. At 3 o'clock.
- Q. What time was it when you were in your room and heard the Duxbury whistle? A. At 2:15.
- Q. So at 2:15 you were in your room and at 3 o'clock you were in your room?
 - A. Yes. I had been on the bridge in the meantime.
- Q. When you wrote this, did you note the time that you wrote it? A. I did.
 - Q. 3 o'clock, was it? A. 3 o'clock.
- Q. What did you do with the note when you had it finished?
- A. I was standing, as I tell you, about this windbreak, I was standing down there, and I called a Quartermaster. This was when the fog shut down. I called the Quartermaster from off the bridge and I stepped into my room and wrote the note on my desk and came out and handed it to him and told him to take it right to the Chief Engineer. Then I went on the bridge.
- Q. You know, as a matter of fact, don't you, that the Chief Engineer did not get that note until 5 minutes before the collision?
- A. That is what I know now; I did not know it then.
 - Q. Do you know why he did not?

A. I do not.

- Q. In answer to a question this morning as to your reason for changing the speed of the "Beaver" to 76 turns, I believe you [730—609] stated that you wanted to regulate the amount of turns the ship could make, so as to know what she would be doing; is that a correct statement of your reason for making the change?

 A. Yes, sir, that is about it.
- Q. Will you explain what you mean by that, I wanted to regulate the amount of turns the ship could make so as to know what she would be doing?
- A. Well, I did not want her to go above 76 and I wanted to know she would be turning that many turns. I did not want to leave it to the engineer's judgment whether he should make 78 or 76; I wanted 76 turns.
 - Q. Or 77? A. Or 77.
 - Q. You wanted 76 turns? A. I wanted 76 turns.
- Q. That was your reason stated to your counsel this morning in your answer to that question, for making the order, that you wanted 76 turns?
- A. To enable me to know what speed my ship was making and to know about what power we were using.
 - Q. What speed would she be making at 76 turns?
- A. At that time, under those conditions, or what speed can she make at 76—what do you mean?
- Q. What speed did you want her to make at 76 turns, when you wrote that note?
 - A. About 12 knots.
 - Q. You wanted her to make 12 knots?
 - A. About 12 knots; about that.

- Q. Why did you want her to make 12 knots?
- A. I considered that was the speed that I required to safely navigate that ship under the conditions.
- Q. Was that a reduction from the speed which you had been making through the channel? A. It was.
- Q. And from the speed which you were making up to Duxbury? A. It was. [731—610]
- Q. What speed were you making before you gave this order to make 76 turns? And I am going to ask you how you know it, after you have answered the question.
- A. I know now that at the time I only was calculating the speed.
- Q. So, at the time, you did not know what speed you were making?
- A. At the time I was calculating the speed. I know what speed we came out the North Channel at.
 - Q. Well, so do I.
- A. And I know what speed we went up to Duxbury Reef at.
- Q. So do I. But, at the time, you did not know what speed you were making, and you were calculating—
 - A. Up to Duxbury Reef I say, I did know.
 - Q. Oh, you did know. A. Yes, sir.
 - Q. How did you know that?
- A. Because we were just 30 minutes from No. 2 Buoy to Duxbury Reef Buoy abeam, which is a distance of $6\frac{1}{2}$ miles; that is 13 miles an hour.
- Q. Did you make a calculation on the ship at the time which resulted in this conclusion of yours, that

you were making 13 knots? A. Why, certainly.

- Q. How did you know, Captain, that you were abeam of Duxbury? A. I heard the whistle.
- Q. So you knew from hearing a whistle in the fog that you could not see, that was half a mile off, that you were abeam of the whistle when you heard it? That is not anything remarkable, is it?
- A. Hold on a minute, now; the whistle of a buoy is entirely different from the whistle of a steamer, and I knew that there was no other buoy there with a buoy whistle but Duxbury Reef, and I knew very well when I was abaft that break-wind that it was abeam. [732—611]
- Q. You and I are getting very close together. You then did ascertain accurately that that whistle, when you heard it from the buoy, was abeam of your ship?

 A. Abeam of my ship.
- Q. How many whistles did you hear, one or more than one?
- A. I heard about two blasts of that whistle, and that is all I heard.
 - Q. And then it carried away?
- A. Yes. I could only hear it for the little while that we were abeam. Of course, I would have to wait for the next swell to come along and then by that time we were just beyond the reach of the sound.
- Q. Your steamer, I understand it, was a passenger boat? A. Yes.
- Q. And she had passengers on her on the 22d of November, on this occasion? A. Yes.

- Q. What do you consider, Captain, to be a compliance with the article with reference to the speed of a ship in foggy weather, with special reference to the "Beaver"?

 A. That article says that—
- Q. (Intg.) Excuse me, I am not asking you what the article says, I am asking you what you consider a compliance with the article with reference to speed.
- A. I was complying with them when I was making 12 knots, according to my estimation.
- Q. When you were making 12 knots, you complied with it? A. Yes, sir.
- Q. That is, you complied with it 5 minutes before the collision? A. Yes, and previous to that.
- Q. Previous to the collision you were making 13 knots?
- A. Up to the time I passed Duxbury Reef I said 13 knots. As I left Duxbury Reef the swell was getting stronger. [733—612]
- Q. I suppose you mean by that, that if you were to go far enough in a heavy swell you would have got your speed down to a few miles an hour.
- A. If it got a little heavier, yes. I have made as low as 5 knots with that same ship in a heavier swell.
- Q. When you were going through the channel you were making 15 knots?
 - A. Yes, that is what it figures.
- Q. And the 13-knot speed to Duxbury is dependent upon the accuracy of your judgment in hearing the Duxbury whistle abeam, is it not?
 - A. My ear, and the reading of the log, and the

time. I run as much on time as I do on anything else, when the ship is in certain conditions and turning so many revolutions.

Q. But the time is dependent on the hearing of the sound abeam?

A. They altogether make me sure of my accuracy in hearing that whistle.

Q. That is, the time is fixed by the hearing of the sound?

A. No, the time is not fixed by the hearing of the sound.

- Q. One end of the time is? A. What end?
- Q. The Duxbury end is?

A. Mr. McClanahan, if you were walking from here to your office, and you have walked it once every two weeks for five years, you know pretty near how long it takes you to walk to the Merchants' Exchange Building. Now, I have gone that route by the Duxbury Reef every two weeks, with that same ship, and—

- Q. (Intg.) For five years? A. No.
- Q. For how many years?
- A. From the 1st of July until the 22d of November, with this ship, but I have gone with other ships; I have been on that route for 5 or 6 years.
- Q. Do all ships act alike on that route? [734—613] A. Mostly all ships act alike.
- Q. Each trip you made on the "Beaver," did you have the same kind of a swell?
 - A. Different swells under different conditions.
 - Q. Therefore the time would be different?

- A. Exactly, but under different conditions I know what our time would be.
- Q. Well, anyway, Captain, you did rely upon the accuracy of the Duxbury bearing?
 - A. I heard the whistle.
 - Q. And you relied upon the accuracy of it?
 - A. To a certain extent, yes, sir.
- Q. When you gave this order of reduction to 76 turns, you knew your ship was then making either 77 or 78 turns, did you not?
 - A. Yes, I felt sure that she was.
- Q. Did you think, when you gave the order to reduce perhaps one turn, that it was a practical order and could be accomplished?
- A. I knew that they might have to go below that before they got it but eventually they would get 76 turns within a few minutes.
- Q. By experimenting you thought they would get 76 turns?
 - A. They don't have to experiment; they all get it.
 - Q. But they get it by experimenting?
 - A. Yes, but it does not take long to get that.
 - Q. 3 or 4 minutes?
- A. Yes, or 5 or 6 minutes, but I wanted to know eventually what she would be turning.
- Q. So this 76 turn reduction order was not intended as a reduction order, it was not intended to reduce speed by that order, but simply to establish a fixed rate of speed?
- A. That is it exactly, to establish a fixed rate of speed. [735—614]

- Q. And when this order was sent by you at 3 o'clock your telegraph was set at full speed ahead?
 - A. Yes, sir.
 - Q. And had been since you left the port?
 - A. Yes.
- Q. And the telegraph was not changed until the time—
- A. (Intg.) I rang her to stop and full speed astern.
- Q. So then it was not the fog that induced you to send this order to reduce to 76 turns?
 - A. Yes, fog was what induced me to do so.
- Q. How much of a difference would that be, Captain, between 77 and 76 turns?
- A. If there had been no fog, and it was clear, I would not have sent any order at all; I would have let her gone along with the speed she came out of port with, which would have been 77 or 78, but on account of the fog I wanted it fixed at a certain rate. If there had been no fog, I would not have bothered.
- Q. You thought 77 turns were too much because of that fog?
- A. There is a general order from me to my Chief Engineer that when I hook her on full speed coming out of port, that he will make 78 or 77—in that neighborhood, not below; and particularly coming through North Channel I want and I require the full power on the ship.
- Q. And on this day the order was you supposed being carried out?
 - A. Yes, being carried out. Now, so he would not

get up to 78 or 79, because of the fog coming in thick, I wanted to be sure of a certain rate of speed and to know that she would not go above or below.

- Q. And you knew she was not making over 78 when you sent the order, if the order was being carried out? A. That is correct.
- Q. So it was not to reduce the speed of the ship but simply to satisfy your own mind and to know that she was going at a [736—615] certain fixed rate, that you sent the order?
 - A. That is the idea.
- Q. This order full speed by telegraph from the bridge might have been 76; that would have been full speed, would it not—it might have been?
 - A. It might have been.
- Q. And your order simply wanted to emphasize the fact that you did not want to go below or above that rate? A. Yes.
- Q. Now, Captain, I understand that after leaving Duxbury, this swell was dead ahead of you, that is, you were poking your nose right into it?
 - A. Practically, yes, sir.
- Q. It was one of those ordinary ground swells you meet on the coast, was it not?
 - A. No, it was an extraordinary swell.
 - Q. An extraodinary swell? A. Yes, sir.
- Q. An ordinary ground swell would not break over the Potato Patch, would it? A. No.
- Q. And this was breaking over the 4-Fathom Bank? A. Very heavy; 3 lines of breakers.
 - Q. And that was at what hour?

- A. 1:45 we went through the Channel.
- Q. What tide was that?
- A. It was the last of the flood.
- Q. Did that swell, as you came back from the point of collision, remain about the same, or was it increasing?
 - A. No, it remained a heavy swell coming back.
- Q. So that if it was breaking over the Potato Patch when you passed through the North Channel it must have been breaking over the Potato Patch at or about the time you returned to port?
 - A. Well, it was.
 - Q. It was? A. It was.
 - Q. You state that? A. Yes.
- Q. You have stated that this swell would affect the speed of [737—616] the "Beaver," retard the speed of the "Beaver"—is that correct?
 - A. After we got out clear of North Channel?
 - Q. Yes. A. Yes, I said that.
 - Q. It would retard the speed of the "Beaver"?
 - A. Yes, it would retard the speed of the "Beaver."
- Q. And I believe you said it would retard it about 3 knots per hour?
 - A. As it got heavier it would, yes, sir.
- Q. When did it get heavy enough to retard it 3 knots an hour?

 A. After we left Duxbury.
 - Q. There was no wind that day?
 - A. Very little.
 - Q. The swell was a long smooth swell, was it not?
 - A. It was a long swell.

United States Coast Pilot, for this coast, referring to page 74, where it says: "Immediately outside the bar there is a slight current to the northward and westward, known as the Coast Eddy Current." That refers to the approach to San Francisco harbor?

- A. Yes, I suppose that must be it, but this is the direction I have always found it to set, it curves with the bank and sets up into the bay about a little east of north.
- Q. And your understanding of the set of the current does not coincide with the statement found in the Coast Pilot Book?
- A. Oh, my opinion and the opinion of the Geodetic Survey differ on very many things.
 - Q. They do? A. Yes, sir.
- Q. This is issued by the Coast and Geodetic Survey of the United States Government, Department of Commerce and Labor? A. Yes.
- Q. Are you familiar with the statement that I have just read?
 - A. I think I have read it, yes.
- Q. And you differ with that statement as to the set of the current? A. At most times, yes.
- Q. So that we cannot get from you any help on this question of current, can we?
 - A. I think I have given a good deal of help.
- Q. Well, perhaps you have. Oftentimes these blessings come disguised. If the current was following you, or setting in your course, that would

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have some effect on the speed of the "Beaver," would it not?

- A. It certainly would. [740—619]
- Q. And that would have a tendency to overcome the effect of this swell you were bucking into?
 - A. It would, a little.
- Q. And it would also, Captain, affect the run of the ship as shown by the log in that it would show less than the run of the ship, would it not?
 - A. No, there would not be that much current.
- Q. We don't understand each other. What I am saying is, that whatever current there was would have a tendency to make the log show less than the run of the ship itself, if the current was following the ship?
- A. If the current was following the ship it would have a tendency to over-run less than it did.
- Q. Yes, now we understand each other. Now Captain, what is it that the log shows your run to have been from Red Buoy No. 2 to the point of collision—16.9, was it not?
 - A. No, 19.6.
- Q. Yes, 19.6. And that would be at what rate of speed? Have you figured it out? 12 knots, is it not? A. Yes, sir.
- Q. 12 knots without any deductions, or is it 12 knots with deductions? We are speaking now of the run of the log. It is 12 knots with the deductions, is it not, Captain? Just figure it out, Captain. What is it without any deductions at all—19.6 is the run shown.

Mr. DENMAN.—What is the time, an hour and a half?

Mr. McCLANAHAN.—An hour and a half.

- A. 12 knots and a quarter without the deductions.
- Q. We don't agree with you Captain, on that.
- A. The log showed 19.6 and we made $18\frac{1}{2}$ in an hour and a half. [741—620]
- Q. Let us keep away from the distance the ship has covered. I want to know the speed shown, as shown by the log. A. 13.06.
 - Q. 13.06 is the speed shown by the log?
 - A. Yes.
 - Q. Without any deductions?
 - A. That is just what the log shows.
 - Q. That is, the speed for one hour would be 13.06?
 - A. Yes, sir.
 - Q. As shown by the log, without any deductions?
 - A. Yes.

(Thereupon an adjournment was here taken until to-morrow Friday, July 21, 1911, at 10:30 A. M.)

JAS. P. BROWN.

[Endorsed]: Filed Dec. 11, 1913. W. B. Maling, Clerk. By Lyle S. Morris, Deputy Clerk. [742—621]

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[Testimony of William Kidston, for Claimant (Recalled).]

WILLIAM KIDSTON, cross-examination, resumed:

The WITNESS.—Now, Mr. McClanahan, I would like to correct the statement I made yesterday. You asked me, I cannot just recollect the nature of your question exactly, but something regarding when I had my consultations with Mr. Denman as regarding the matter of his answer to the complaint; I said that from the time on or about when the investigation took place with the inspectors I had not had any consultation with Mr. Denman until along about May; thinking it over afterwards I remembered that Mr. Denman had sent a telephone message to me to bring up witnesses from the "Beaver," and I did so. That

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was along about January, about the middle of January.

Mr. DENMAN.—Q. And then between January and May?

A. From then until about the 10th or 15th of May I had not seen Mr. Denman.

Q. Where were you, Captain?

A. Most of the time I was in bed. I was sick. I was laid up at home.

Mr. McCLANAHAN.—Q. Captain, your testimony before the inspectors was given on November 25th, was it not, three days after the collision?

A. Yes, I think it was.

Q. I want to read you a portion of your testimony and ask you if you recollect it. You were asked:

"Q. About what speed were you making through the water?

A. I ascertained after 11 knots, 76 turns.

Q. What was your speed under full headway?

A. 17 knots.

Q. What is your maximum revolutions when running full speed? A. From 83 to 85 turns. [745—622]

Q. From the time you went up the North Channel you were running full speed?

A. Yes, sir.

Q. When you left there you ran full speed?

A. 11 knots."

Then I asked you at that hearing the following question:

"Q. What was your speed just before you

gave your order to reverse your engines?

A. 11 knots."

Then one of the inspectors asked you:

- "Q. How fast do you think your steamer was going when the collision took place?
 - A. She was making 11 knots, or a trifle over.
 - Q. I asked you what was the speed of your ship when the collision occurred?
 - A. She was stopped when the collision occurred."

Do you remember that evidence, Captain?

- A. Yes, sir.
- Q. With reference to this 11-knot speed I would like to ask you when it was after the collision that you ascertained that the "Beaver" was making 11 knots.
- A. When I was making up my report for the Inspectors I measured the distance from Duxbury Reef Buoy that I had heard abeam to the point of collision that I had ascertained by cross-bearings, and I measured it as 11 knots. 11 miles from Duxbury Reef Buoy to there. And as we had passed Duxbury Reef Buoy at 2:15, and the collision occurred at 3:16, and that I had given the bell to stop and full speed astern at 3:15, which was one hour, that she had been making 11 knots in that hour. But I made a mistake. After a more careful investigation of the distance I found that it was 12 instead of 11. That is my reason for saying later that the ship was making 12 knots. That is what I base the speed of the ship on.

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Q. When did you discover this mistake? [746—623]

A. Oh, I could not tell you what time I discovered it, but I discovered it later on in going over the measurements again and going over the condition of things.

Q. You have in mind the time when you discovered

it. Was it before you were taken sick?

A. Yes, I think it was.

Q. Where did you discover it? Where were you when the discovery was made, or when you made the new calculation that a mistake had been made?

A. On the same chart, on board of the same vessel.

Q. You were aboard the vessel at the time?

A. I went aboard the vessel at the time, on one of her trips back from Portland, and I got my own chart and measured it by my own chart.

Q. And then you reported that to Mr. Denman, did you?

A. I think I spoke about it to Mr. Denman, yes, sir.

Q. Did you speak about it to Mr. Page?

A. No.

Q. You have had very little to do with Mr. Page in connection with the case, have you not?

A. Not a great deal with Mr. Page.

Q. More with Mr. Denman? A. Yes.

Q. You remember reading the respondent's answer yesterday in the freight suit?

A. I remember a little of it, not much.

Q. Did you read the answers to the interrogatories

(Testimony of William Kidston.) at the end of that?

- A. No; you remember I asked you if you expected me to read it all, that time you came and looked.
- Q. These interrogatories are sworn to by Mr. Frey on the 15th day of May, 1911, and in answer to one of our questions he says that the speed of the "Beaver" at 3 o'clock was 11 knots, with her engines making 77 revolutions per minute; do you know where he got that information? A. I do not. [747—624]
 - Q. That is not in accordance with the facts, is it?
 - A. I never gave it to him.
 - Q. Answer my question. A. No.
- Q. The statement is not in accordance with the facts? A. No.
- Q. She was going at a higher rate of speed than that at 3 o'clock?
 - A. It proved afterwards that she had been, yes.
- Q. Captain, will you please take a piece of paper and figure for me the slip of the "Beaver's" propeller when she makes 12 knots at 77 revolutions. Can you figure that, Captain?
- A. I believe I can. You want when she was making 12 knots at 77 revolutions?
- Q. Yes. That is in accordance with the fact, is it not? A. Yes, sir.
- Q. Now, I want you to figure out what her slip was. A. I figure that 29 per cent slip.
- Q. I think you are about right, Captain. In the answer which I have referred to of the respondent in the freight suit, Mr. Frey says that the slip of the "Beaver" at 3 o'clock on November 22, 1910, was 25

per cent. Do you know where he got that information? A. I do not, no, sir.

- Q. He did not get it from you? A. No, sir.
- Q. It is rather a large slip, is it not, Captain, 29 per cent? A. I have seen her 35 per cent.
 - Q. Well, answer my question.
- A. 29 per cent is a large slip, but not a large slip for that ship.
 - Q. What is that?
 - A. But not exceedingly large for that ship.
- Q. What is the matter with that ship, what is the peculiarity?
- A. Her nominal slip, her real slip that she always has got is 12 per cent, 11 to 12 per cent. [748—625]
 - Q. 11 to 12 per cent?
- A. Yes, no matter whether she is running in the bay, that is her real slip, which is nominal.
- Q. I believe you were on her on her trial trip, were you not? A. I was.
 - Q. Do you remember what her slip was then?
 - A. I do not.
- Q. Suppose you look at these blue-prints, which I hand you, furnished as I understand to the owners by the builders and see if you can refresh your memory as to what her slip was at that time.
- A. No, it would not refresh my memory Mr. Mc-Clanahan, because I had nothing to do with the taking of the slip, or anything of that kind.
- Q. How do you account for a 29 per cent slip on this particular day?
 - A. The trim of the ship, the lightness of her

draught; it takes 18 feet 2 inches of draught aft to cover the blades of the propeller, and we were only drawing 18 feet 6 inches that day lying alongside the wharf when we left port, consequently those blades were only covered 4 inches in still water, and going out against that heavy swell her wheel was exposed—the driving-power of it was exposed to such an extent that I consider that 29 per cent slip on that day, anywhere from 25 to 29 per cent was not an excessive slip.

- Q. You do not know that the wheel was exposed?
- A. I do know it.
- Q. How do you know it?
- A. I know it from the vibrations of the ship. I know that the wheel was exposed every time it went into the head swell.
 - Q. You know that from the vibration of the ship?
 - A. Yes, sir, from the vibration of the ship.
- Q. How does the vibration of the ship tell you that?
- A. The tremble. When the wheel is not turning in solid it [749—626] trembles and vibrates the ship. When it races you know there are times—
- Q. (Intg.) By the way, Captain, you did not set your log, did you, yourself—you did not stream it yourself? A. No, I never do.
 - Q. You simply give orders? A. Yes, sir.
 - Q. And they are executed? A. Yes, sir.
- Q. On this particular day you gave the order to stream the log, did you?
 - A. Yes, I would say I did.

- Q. Who did you give it to?
- A. To the second officer, and in this way: I would say, now see that your log is streamed. That is about the order I would give him.
- Q. And you assume that that order was carried out? A. Yes, sir.
 - Q. When was the order given?
- A. Oh, previous to getting up to No. 2 Buoy, coming through the Channel.
- Q. You do not know when the log, of your own knowledge, was streamed and set at zero?
- A. Yes, I can say I do because when the log is to be set would be at No. 2 Buoy.
 - Q. That is the rule, is it?
- A. That is the rule. The quartermaster has gone aft previous to this to stream the log, getting it ready for setting it at zero when No. 2 Buoy would be abeam. It is the same rule carried out, and no departure anywhere. When the object at which the log is to be set is abeam, the quartermaster does not look for that object abeam, it is the officer on the bridge, and when the object is abeam the officer on the bridge whistles to the quartermaster, which he did on this particular occasion, which I know because I was standing alongside of him, and then the quartermaster knows that it is time to set the log at zero. That was carried out on this [750—627] day as it always is.
- Q. You say you were on the bridge and heard the whistle? A. Yes, sir.
 - Q. And you assume that the quartermaster obeyed

the order? A. Yes, that he obeyed the order.

- Q. And that is all you know about it?
- A. Well, that is considerable.
- Q. Well, that is all you know about it, whether it is considerable or not?
- A. The order was given and I know it was carried out.
 - Q. You know it was carried out?
- A. So far as the whistle to tell him that it was abeam, and the quartermaster was aft, and I presume he carried out the order.
- Q. Yes, that is as far as you can go, Captain, is it not? You presume he carried out that order?
 - A. I presume he carried it out.
- Q. And you presume he carried it out at the time it was given? A. Yes, sir.
- Q. Speaking of being on the bridge, Captain, we have in the record three occasions when you were not on the bridge; were there any more occasions when you were not on the bridge, Captain?
 - A. At this particular time?
 - Q. After you left the North Channel?
- A. I don't recall any except the time I went down with Captain Lie to get him some dry clothes.
 - Q. I mean before the collision?
- A. Before the collision, no, I don't recall. I went down to my lunch and then I came up, and I went down again and stood under the bridge. I very often go off the bridge and stand underneath it in the shelter of this wind-break, where I can hear things better. The law does not [751—628] compel me

to stay on the bridge all the time and I take the most advantageous spot I can get at the time for listening for fog-whistles or anything of that kind; but I don't remember being off it more than those three occasions on that particular day.

- Q. Were you on the bridge when you passed these whistles after you passed Duxbury?
- A. No, I was under the bridge at this particular spot I am speaking about; I went on the bridge on one occasion that we picked up one of the whistles.
 - Q. That was on the starboard side of the ship?
- A. I went up on the bridge on the occasion of picking up the whistle on the starboard side.
- Q. Well, I am asking you where this sheltered place is?
- A. Both wings of the bridge, both port and starboard.
- Q. Where were you when you heard the first whistle of the first vessel—were you on the bridge or off the bridge?
 - A. I believe I was off the bridge at that time.
 - Q. And where were you?
 - A. I was under it, on the starboard side.
 - Q. On the starboard side you were?
 - A. Yes, sir.
 - Q. And you heard the whistle on the port side?
 - A. I heard the whistle on the port side.
- Q. Where were you when you heard the whistle of the second boat—were you on the bridge or off the bridge?
 - A. Those were the fishing boats, I was on the

(Testimony of William Kidston.) bridge at that time.

- Q. When you heard the whistle of the second boat you were on the bridge, Captain?
 - A. I was on the bridge then.
- Q. During all the time that you were hearing the second boat's whistle? [752—629]
 - A. Yes, as far as I can remember.
 - Q. That was the boat you saw, was it?
 - A. That was the boat I saw.
- Q. Where were you when you heard the whistles of the third boat? A. I was still on the bridge.
 - Q. Still on the bridge, were you? A. Yes, sir.
- Q. And all of these whistles were heard after you had passed Duxbury?
- A. After we had passed Duxbury. This place that I refer to under the wing of the bridge is on a sheltered deck. On this particular ship it is as high as the ordinary coast ship's bridge. It is the same deck as the pilot-house. It is practically a lower bridge.
- Q. Why did you not stop your engines when you heard these whistles ahead forward of your beam? Was it because you ascertained the position from hearing the whistles?
- A. They were so far away, and the fog at the time was not dense, and I could see practically for pretty near a mile. There was no occasion for me to stop.
- Q. That is, you considered that you had ascertained within the rule the position of those vessels and therefore were relieved from stopping your engines?

A. I had ascertained that they were in safe positions so I could afford to go ahead and I was not breaking the rules of the road.

Q. Your understanding of the rule then is that if the whistle heard forward of the beam is ascertained clearly enough for you to know that there is no danger of collision, then you need not stop, and the rule does not apply?

Mr. DENMAN.—You mean in foggy weather or hazy weather?

Mr. McCLANAHAN.—Foggy weather. [753—630]

Mr. DENMAN.—Do you mean fog or haze?

Mr. McCLANAHAN.—Q. Captain, is that your understanding of the rule?

A. When I could see the distance I could that day at that time—

- Q. (Intg.) You are referring to what time?
- A. At the time I heard and saw those steamers.
- Q. Did you see them all at once? A. No.
- Q. Did you hear them all at once? A. No, sir.
- Q. How long an interval was it between hearing the whistles of the first steamer and hearing the whistles of the second steamer?

A. I would be afraid to venture and say how long it was because I did not take the time and the time was not taken between. I don't know how long it was.

Q. Did the condition of the fog remain the same?

A. I told you before, Mr. McClanahan, that the fog would shut down a little and then lift up and it had

not got to be what we call thick fog at any of these stages when I heard these whistles.

- Q. And you do not know the interval of time that elapsed between hearing the whistle of the second and hearing the whistle of the third boat?
 - A. No, sir, I do not.
- Q. What was the condition of the fog, with reference to the distance at which boats could be seen, when you heard the first whistle of the first boat? How far could you see?
 - A. I could see about a mile.
 - Q. You could see about a mile?
 - A. About a mile.
 - Q. And yet you did not see this boat?
 - A. I did not see the boat.
 - Q. So she must have been more than a mile away?
 - A. She must have been. [754—631]
- Q. Then you consider that hearing a whistle out of the fog, that was a mile away from you, was a situation that relieved you from the obligation of stopping your engines, under the rule?
- A. Particularly when you hear the whistle abeam, as I heard this whistle.
- Q. You said it was a little forward of abeam, did you not?
- A. It might have been a little but it was practically abeam so far as I was concerned in it. It was practically abeam, although it might have been a little forward of abeam.
- Q. And hearing the first whistle, you did not know the course of the vessel, did you? A. No.

- Q. So under the circumstances of that situation, you considered that the rule was being followed?
 - A. Yes, sir.
 - Q. And that it was not obligatory upon you?
 - A. Exactly.
- Q. What was the condition of the fog with reference to your ability to see when you heard the first whistle of the second vessel?
- A. I could see pretty well. I could see practically a mile at that time.
- Q. You could see practically a mile at that time when you heard the first whistle of the second vessel?
 - A. Yes, sir.
 - Q. And where was that whistle heard?
- A. On the starboard beam, or probably a little forward of it.
 - Q. That is the vessel you saw, was it?
 - A. That is the one I saw.
- Q. On the starboard beam, a little forward of the starboard beam?
 - A. A little forward of the starboard beam.
- Q. You did not consider the rule obligatory upon you when you heard that first whistle for the same reason that you did not consider it obligatory upon you when you heard the first whistle of the first vessel; that is, her position was ascertained [755—632] to be one not involving danger of collision?
- A. That is it, it was not involving danger of collision because I could see her also.
- Q. Well, you saw her after you heard the first whistle?

- A. Practically at the same time; she whistled and she came out of the fog and I saw her loom up right at once, I thought I said that. When we heard her whistle we practically saw her, she came right out of the fog.
 - Q. And she was about a mile from you?
- A. She was I should say about a mile inshore from us.
 - Q. Which way was she travelling?
- A. She was travelling to the southward. She was going to the North Channel.
 - Q. How long did you see her?
- A. For a very little while, I could not say how long. After she got abaft of the beam she soon vanished from sight. I could not say just how long it was.
- Q. You saw her just a point or two forward of the beam? A. No, not as much as that.
 - Q. Not as much as a point?
 - A. Probably a point.
 - Q. Probably a point?
 - A. Yes, probably a point.
- Q. And when she got how far abaft of the beam did you lose sight of her?
 - A. Oh, maybe two points abaft of the beam.
- Q. What was the fog condition when you heard the first whistle of the third vessel?
- A. Practically the same, practically the same condition.
 - Q. You could see then a mile?
 - A. Yes, I judged I could see a mile at that time.

- Q. And you did not stop for the same reason that you did not stop for the other two vessels?
- A. Yes, sir, it was further away from us. It was further in shore.
- Q. You did not consider there was danger of collision? [756—633]
 - A. I did not consider there was danger of collision.
- Q. And that is your interpretation of the rule, is it, that where the first whistle does not show danger of collision, that then the rule is not binding upon you?
- A. Oh, now, you are leading me to something that is not a fact, and not what I think at all.
- Q. Well, I will cut you loose and let you go it yourself. What is your interpretation of the rule?
- A. I consider that I was carrying out the rule. The rule is that under circumstances and conditions you shall do so and so. The circumstances and conditions were sufficient to me to prove that I could go ahead on my course, that I was not running into any danger of collision.
- Q. I am asking, Captain, for your understanding of the rule as a seafaring man. Does the rule requiring the engines of a steamer to be stopped on hearing in a fog the fog-signal of another vessel forward of the beam, does that rule apply, in your judgment, when the sound heard does not involve danger of collision?

A. And until you have ascertained the position, and then navigate with caution. Yes, that is the rule.

Q. Now, answer my question, Captain.

A. Under the conditions on this day, and the conditions of fog, and the distance I could see in it, I consider that I was complying with the rules.

Q. That does not answer my question.

A. Well, you make it a little clearer to me and I will be pleased to answer it.

Mr. McCLANAHAN.—Read the question, Mr. Reporter.

Mr. DENMAN.—Of course all this examination is open to the objection [757—634] that the rule speaks for itself?

(Question read by the Reporter.)

Mr. McCLANAHAN.—Now, Captain, answer that question.

Mr. DENMAN.—What rule do you refer to, Mr. McClanahan?

Mr. McCLANAHAN.—Don't you know?

Mr. DENMAN.—I would like to have it before us so the exact words of it can be gotten.

Q. Can you state the rule, Captain, the exact words of it?

A. Probably not the exact words, no.

Mr. McCLANAHAN.—Q. You know the rule I refer to, do you not, Captain?

A. Yes. I think I practically repeated it here a little while ago.

Q. What is that?

A. I say I think I practically repeated it here a little while ago.

Q. Now, answer the question, please.

- A. I don't believe I can make any different answer to that question than I have already made.
- Q. I am not applying the question to the "Beaver" on the 22d of November, 1910. I want your understanding of the rule, that is all.
 - A. Oh, my understanding of the rule.
 - Q. Yes, and that is all.
- A. Well, that amounts to the same thing, doesn't it?
- Q. Well, you can answer my question yes or no, does it apply when, in your judgment, there is no danger of collision?
- A. The rule distinctly says that on the hearing of a fog signal—in the first place, the fog is supposed to be fog and you are blowing your whistle, when you cannot see a mile or two, if the fog comes down. That is my definition of the fog.
 - Q. This rule applies only to fog? [758—635]
 - A. And to falling snow or rain.
 - Q. And to mist?
- A. And mist. The rule goes on to say that if a steamer's fog-signal is heard forward of the beam you shall stop and navigate with caution until you ascertain the direction and all danger of collision is avoided.
- Q. Have you attempted now to give me the words of the rule?
- A. Not verbatim, no; but that is practically the understanding of that rule.
- Q. Captain Kidston, I must insist upon an answer to my question. You know what it is. I will say,

generally, that I want to know whether your interpretation of that rule is that if the first whistle heard does not involve danger of collision, is the rule obligatory, do you have to stop your engines, if the whistle heard does not involve danger of collision?

Mr. DENMAN.—You want the Captain's opinion on that, not the decisions of the Courts?

Mr. McCLANAHAN.—Simply his opinion.

- A. No, sir, in my opinion when the signal heard does not involve danger of collision, at the distance that I heard these whistles, and could see—
- Q. (Intg.) Please leave out November 22d, Captain; I am asking you now for your interpretation of the general rule and without any reference to any particular ship or to any particular day. When the whistle heard does not involve danger of collision, in your judgment does the rule apply?
- A. When it does not involve danger of collision the rule does not apply.
- Q. Suppose the whistle heard is 4 or 5 miles away, does your judgment of that involve danger of collision? A. No.
- Q. And therefore the rule would not apply in your judgment [759—636] under those circumstances?
- A. According to what bearing the whistle was when you heard it.
- Q. What bearing would involve danger of collision?
- A. If you heard the whistle four or five miles away and it was dead ahead, if you kept on, yes, there is danger of collision.

- Q. Would that involve danger of collision, if when you heard the whistle it was 4 or 5 miles away?
 - A. Yes, it does involve danger of collision.
- Q. Captain, why didn't you stop your engines when you heard the first whistle of the "Selja"?
 - A. I stopped them when I heard her first whistle.
- Q. Do you want to shift the responsibility for not speaking to the officer on the bridge?
 - A. No, I do not.
- Q. Then I will ask you the question again, why were the engines of the "Beaver" not stopped when the first whistle of the "Selja" was heard?
 - A. Now I can answer you.
 - Q. Well, answer it.
- A. When the whistle of the "Selja" was first heard it was reported to me almost as soon as it could be reported and I acted almost as soon as it was possible to act. Our own whistle blowing just at that moment, I remember distinctly saying to the second officer, "Is the whistle close aboard?" It was indistinct, I did not hear it very loud. I said, "We will hear it again, I will get it myself." That is the reason we did not stop.
 - Q. That is, you heard a whistle and—
 - A. (Intg.) I did not hear it.
 - Q. Well, a whistle was heard by the "Beaver"?
 - A. Yes, sir. [760—637]
- Q. That was so indistinct that you could not tell whether it was far or near, and that was the report that was sent to you, and you said—

- A. (Intg.) That was the report that was told me on the bridge.
- Q. And you said, "I will wait until I hear another"?
 - A. No, I did not wait. I starboarded my helm.
 - Q. That is not stopping your engines, is it?
- A. No, it is not, but I was acting, I was starboarding my helm.
- Q. Let us confine ourselves, Captain, to Article 16. I asked you why you did not stop your engines when the whistle of the "Selja" was heard and you answered me, as I make it out now, that the whistle heard was indistinct?
 - A. It was a very indistinct whistle.
 - Q. And it was indefinite as to being far or near?
 - A. If it was near we could hear it better.
 - Q. And that is your reason for not stopping, is it?
- A. But it being indistinct, it must be some distance away.
- Q. I say that is your reason for not stopping the engines?
- A. That is my reason for putting my helm a-starboard and not stopping; I wanted to hear it again.
 - Q. Why did you put your helm a-starboard?
- A. Well, I will tell you why I did, I thought it was a steamer coming down on the parallel course with my own ship and—
- Q. (Intg.) Let me ask you right there, Captain, why did you think that? You heard but one whistle—or you didn't hear any whistle?
 - A. I didn't hear any whistle.

- Q. It was simply reported to you?
- A. It was reported to me that they heard a very indistinct whistle. [761—638]
- Q. Now, why did you think the ship was coming down the coast?
- A. Because we had been meeting steamers coming down. I knew that we were coming out of a bight. I knew we passed two of the trawlers, and I know they always travelled in twos and threes and fours, and the officer reported that he heard this very indistinct whistle, I thought it was another one of these trawlers, or a steam-schooner.
- Q. Well, don't you stop for trawlers as well as for anything else?
- A. Yes, but if I thought it was a trawler coming down on a parallel course—you asked me if I thought it was on a parallel course and I said I thought it was one of them, on account of the smallness of the whistle I heard.
- Q. What were you starboarding for, to get out of the way? A. To give more room.
- Q. You didn't know what course this whistle indicated?
- A. My God, I never dreamed it was anybody coming out from the beach, going off shore; I never thought that until I got the second whistle. I never thought it was anybody inside of me and heading off shore.
 - Q. You never dreamed that? A. No.
- Q. Captain, do you change your course as a rule on hearing a fog-whistle?

- A. Not as a rule, not as a rule.
- Q. It is rather a risky thing to do, is it not, on hearing one whistle to change your course?
 - A. On hearing one whistle, I think it is.
 - Q. Didn't you want to take a chance that day?
- A. Well, I changed my course to starboard that day, to give him more room, considering it was a ship—I thought it was a ship coming down on a parallel course.
- Q. Why did you stop to reverse your engines when you heard the second whistle? [762—639]
- A. Well, then I made up my mind that I might have been wrong; and when I heard the second whistle it sounded to me very close aboard. The officer who said he heard the first whistle said it was about a point on the starboard bow and I had swung about a half point, and that whistle seemed to me—I did not go to the compass—but it seemed to me to be still about a point on the bow, that she might be crossing our bow and there was only one thing for me to do, to stop and go astern and put my helm a-starboard and try to swing under her stern.
- Q. When you heard the second whistle, you ascertained the position of the "Selja"?
- A. I ascertained it nearly, I ascertained it as nearly as I could.
- Q. And that was a case where you obeyed the rule even though you had ascertained the position of the vessel? You know the rule, as I remember it, say—inferentially—that you don't have to stop if the position of the vessel has been ascertained. Now, here

is a case where you ascertained the position and therefore you stopped.

Mr. DENMAN.—Your inference then is that he can ram a vessel if he ascertains where she is?

A. He was blowing one whistle and I knew he was under way and I said at that time he must be crossing our bow; my whole object was to get under his stern, and by putting the helm a-starboard I thought I could get under the stern.

Mr. McCLANAHAN.—Q. You stopped and reversed because the whistle told you there was danger of collision?

A. Yes, sir; Mr. McClanahan, wise men will sit on these cases, and there have been a lot of you wise men sitting on these cases for weeks, and it will go up to wiser men bye and bye to judge; wise inspectors sat on my case for several days and it [763—640] took two weeks for them to decide whether I was right or wrong. Now, in my position at that time as the captain of the ship I had one second to make up my mind whether I was right or wrong.

Q. In other words, it was in extremis that you acted?

A. I acted according to the best of my judgment, complying with the laws for navigating ships, to the best of my judgment and in the belief that I was right.

Q. The answer in the case brought by Olaf Lie vs. The "Beaver" says that this first whistle of the "Selja" was heard at $3:13\frac{1}{2}$ do you know where that information came from?

- A. I am blessed if I know; I don't know.
- Q. Did you hear it at 3:131/2?
- A. I did not take the time when I heard that first whistle.
- Q. If you in your direct examination here have stated that you heard the whistle at 3:13, was that an inadvertence on your part?
- A. If I said anything in the direct examination, the only way I could say that was we saw her and went astern; we went astern at 3:15, we stopped and went astern at 3:15. Now, the whistle I heard from that ship, the one I heard from that ship was just a second or an instant before I went astern. Now, that is the only way I can place that time.
- Q. What will you say to your evidence in this case, that you heard a whistle at 3:15?
 - A. I never said that.
- Q. And if you did say it, it is a mistake? As a matter of fact, Captain, the record shows that you did say it? A. That I heard a whistle at 3:13?
 - Q. Yes; is that an incorrect statement?
- A. Well, the rest of the statement must contradict that because my statement says that after the first whistle was heard by the officer and reported to me, that I went across the bridge [764—641] and ordered the helm a-starboard, and our own whistle blew and after it finished blowing I immediately got a whistle from the "Selja" and immediately upon hearing the whistle from the "Selja" I stopped and went full speed astern, which was at 3:15.
 - Q. Well, at any rate, you did not hear any whistle

at 3:13? A. I don't remember any 3:13 about it.

Q. I want to know, Captain, something about the situation when you first saw the "Selja"; you remember seeing her?

A. Yes, very distinctly. She was of a great deal of interest to me when I saw her.

- Q. Did you see the whole ship at once? A. No.
- Q. She loomed up, did she, gradually?
- A. Not very gradually, very quickly.
- Q. Very quickly? A. Yes, very quickly.
- Q. Was that because of the speed of the "Beaver"? How do you account for that?
 - A. She came into view very quickly.
- Q. But at first there was an indistinct outline? That was the first sight you got?
 - A. That was the first sight.
- Q. Had you or had you not blown three whistles at that time? A. I had blown them.
 - Q. You had blown them? A. Yes, sir.
- Q. So that you had blown the whistles before you saw the "Selja"?
 - A. Before I saw the "Selja."
- Q. Do you know the three whistle rule so called? Do you know what it is?
 - A. To be applied when you are backing.
 - Q. On all occasions?
- A. No. on this particular occasion. It is for this particular case.
- Q. Does it apply when you are backing, when you are not within sight of a vessel?
 - A. Yes, sir, it does.

- Q. That is your understanding of it, is it?
- A. Yes, sir. [765—642]
- Q. How soon after seeing the "Selja" did she whistle three times?
- A. Oh, I cannot say how many seconds, but just after I had seen her; after she had come fully in view she blew her three whistles.
- Q. So that she was in view sometime before she did blow three whistles?
- A. I said just after she had come fully into view she blew her three whistles.
- Q. As I understand you, you at that time starboarded your helm, put it hard over?
 - A. At which time?
 - Q. Just before the collision.
- A. No, just before the collision I had it hard-aport.
 - Q. Oh, you had it hard-a-port? A. Yes.
- Q. The first order was a-starboard and the second was hard-a-port? A. Yes, sir.
- Q. That was before you saw the "Selja" was it not?

 A. That was before I saw the "Selja."
 - Q. What did you do that for?
- A. To go under her stern if she was crossing my bow.
 - Q. Yet you had not seen the boat?
 - A. I had not seen the boat.
 - Q. That was good judgment, was it, Captain?
 - A. I consider it was very good judgment.
- Q. And yet if you had not done it there would have been no collision?

A. If I had kept my helm to starboard I don't believe there would have been any collision.

- Q. If you had not put it to port there would not have been any collision? That illustrates, does it not, Captain, the danger of changing your helm when you have not seen a vessel?

 A. No, it does not.
 - Q. It does not? A. No, sir,—
 - Q. Well-
- A. (Continuing.) Will you let me finish my answer? [766—643]
- Q. Yes, surely; don't think I am trying to stop you from saying anything, Captain?
- A. The reason why I say if I had kept my helm to starboard there would have been no collision is from the proofs in my mind since, from my own personal observation at the time, that if I had known that ship was lying still in the water, and she had been blowing two whistles instead of one, which indicated she was under way, and I kept my helm to starboard there would have been no collision.
- Q. Now, Captain, what time elapsed from the starboarding to porting your helm?
- A. Oh, it was a very short time, very little; I don't know in seconds how much it was, but it was not more than—say our whistle blew, that is 5 seconds, and his whistle blew—probably 10 or 15 seconds, or something of that kind elapsed from the time the order was given to starboard until the order was given to hard-a-port.
- Q. After the order "hard-a-port" how long was it before you struck the "Selja"?

- A. I would say about a minute and a half; about a minute and a half, I think.
 - Q. Did not this collision take place at 3:16?
 - A. 3:16, yes.
 - Q. You reversed your engines at 3:15?
- A. Yes, that is what the log shows; that is what the log shows.
 - Q. I am asking you for your judgment.
- A. I have told you my judgment. I said about a minute and a half.
- Q. In your judgment, then, the collision took place shortly after 3:16?
- A. Or I may have gone full speed astern 20 seconds before 3:15. I want to tell you, Mr. McClanahan, there are no bridge officers and there are no engineers in [767—644] taking time by telegraph, and such like, that take the seconds; they generally take the nearest to the minute. It may have been 3:14-40, and they may have called it 3:15. The same in the engine-room. Or it may have been beyond that.
- Q. Don't you know that that statement does not hold true of the "Beaver," that the engine-room bell-book does show seconds?
- A. It shows the half minute only. He does not put it down in seconds, he will take the half minute, maybe.
 - Q. But that is 30 seconds?
- A. Yes, but if it should want 15 seconds of being the full minute he will not take that, he will take the minute. Now, 15 seconds is a long time backing

(Testimony of William Kidston.) full speed astern.

- Q. You were on your course practically when you reversed, were you not?
- A. No, I was not on my course practically when I reversed. I had starboarded half a point.
 - Q. Well, is not that practically on your course?
- A. Well, you can call it so if you want to, but I would not say it; I would say I was not on my course, I starboarded half a point.
- Q. So you were half a point off your course of North 86 West when you reversed?
- A. When I reversed—no, when I ordered hard-a-port.
- Q. I am not talking about hard-a-port, I am talking about your reversing your engines; I say you were half a point off your North 86 west course when your reversed your engines:
- A. Yes, because I reversed immediately; yes, I guess about that.
- Q. How much had you swung under the hard-aport helm at the moment of impact, according to your judgment?
 - A. 5 points, or 6 points, maybe. [768-645]
 - Q. 6 points in a minute and a half?
 - A. I said 5 points, or 6 points maybe.
- Q. You were on your north 86 west course headed into the swell, were you?
 - A. Headed into the swell.
- Q. And when you swung under the port helm you had the swell on your port quarter?
 - A. No, sir, I did not.

- Q. Where did you have the swell?
- A. Forward of the a-port beam.
- Q. And you had swung 5 or 6 points at the time of the collision? A. About that.
 - Q. And you struck the vessel at right angles?
 - A. Struck her at right angles.
- Q. And she at the time you struck her was pointed in what direction?
- A. Well, she was pointed up into the swell but was not into it.
 - Q. Just a little west of it?
- A. She was pointing up angling to the swell. She was not into the swell when we struck her.
- Q. She was getting into the swell; that is, she was heading into the swell, working that way?
 - A. Yes, sir, she was working that way.
- Q. How much did she lack of being head-on into the swell?
- A. Oh, probably two points maybe, or a point, a point or two; I don't remember; I could not tell just exactly.
- Q. So, then, we have a pretty clear understanding from your testimony of how the boats were headed at the time of the impact, have we not?
 - A. I have, I don't know whether you have.
- Q. Well, from your testimony; you have told me all about it, have you not?
- A. Oh, I don't think you have got it all out of me yet. [769—646]
- Q. Well, we will get it all if it takes all winter. What else is there that you have not told me, Cap-

tain, about the way the boats were headed at the time of the impact? Tell it all.

- A. We had the swell forward of our port beam.
- Q. You have told us that.
- A. The "Selja" was heading up into the swell, but not into it, she was set up for it, angling on the swell.
- Q. You have told us all that. Tell us something that you have not told us about how they were heading, so that we may have it all.
- A. You ask me the questions and I will answer them.
- Q. Well, I think you have told us all, have you not, about what you know of the heading of the two ships at the time of the impact?
 - A. You said you knew it all.
- Q. I said "we"; I mean that the record shows it all. A. Maybe it does, I don't know.
- Q. Now, I understand that after the impact the "Beaver" backed straight out?
 - A. No, I don't say that she backed straight out.
- Q. What is your understanding of how she backed?
- A. After we hit that ship we remained in that hole I suppose for maybe 5 or 6 seconds, maybe a little longer; it seemed longer to me but it might not have been any longer. The "Selja" was backing at the time—
 - Q. (Intg.) At the time you hit her?
- A. At the time we hit her she was backing. It seemed to me that for the time we remained in that hole that we penetrated in her side, that the "Selja"

in backing had pulled us around a bit with her, had pulled our bow around with her as she was backing, so that when we came out of the hole we came out at [770—647] a little bit more of an angle than we went in.

- Q. That is, she pulled your bow a little more to starboard? A. Yes, sir.
- Q. So that when you came out you backed straight out from that angle that she pulled you around to?
- A. Yes, straight out from that angle, but not straight from the angle at which we went in.
- Q. How far did you back your vessel from the "Selja" before you stopped?
- A. When we came out of the "Selja" I was not backing at all. After I got out clear of the "Selja" I backed a little way, maybe half a ship's length.
 - Q. And then you stopped? A. Then I stopped.
- Q. Then what did you do next, what was the uext maneuver you made?
 - A. I cleared away the boats and lowered two.
 - Q. I am talking about the maneuvers of your ship.
- A. Oh, I stopped there and occasionally would give what we call a kick-back; she had no stern-board on her and a kick once in a while with the right-hand propeller will serve to slew the ship a little, to keep her bow still a-starboard. For some reason our bow kept canting over to port. My object was to keep the swell on the port bow, so as to make a lee for the boats that were coming with these wrecked people.
 - Q. You don't know why your boat kept canting

to port, do you?

A. No, I could not say that I do. It may have been that there was some eddy deflecting from the stern of the "Selja" as she went down, that might have been sweeping against our starboard bow. I don't know what it was.

Q. But a current would account for it?

A. If there was a current hitting me on the quarter that would account for it, or if it was hitting me on the starboard bow [771—648] it would account for it the other way.

Q. Throwing it to starboard?

A. If it was hitting me on the starboard bow it would throw me to port; if it was hitting me on the port quarter it would throw me to port also.

Q. Your vessel had the tendency though to cant to port? A. Yes, sir.

Q. And you didn't know the real reason for it?

A. I didn't know the real reason for it.

Q. Was she lying as we have got her now when you took the bearings?

A. No, her bow had swung a little to port at the time I got the bearings.

Q. Swung up against the swell?

A. Yes, sir, as I tell you, she had a tendency to swing to port. We swung a little more into the swell. We gradually got away into the swell as the last boats came down.

Q. This unknown force gradually swung your bow to port so you were into the swell finally?

A. Yes. I don't know what it was, but that is

(Testimony of William Kidston.) the way it swung.

- Q. The inclination would be to throw the ship the other way, to starboard, would it not?
 - A. Yes, sir.
- Q. But for some reason that you don't know of, the ship was swung to port?
 - A. She was swung to port.
- Q. It was before she got fully into the swell that you took the bearings?
- A. I cannot recollect that. Her head was pretty near into the swell, maybe a little on the port bow, at the time I took the bearings.
- Q. You have given us, have you, Captain, your best judgment and recollection of the position of those boats at the time of the impact, just before the impact and after the impact? A. Yes, sir.

[772—649]

- Q. The "Beaver" at no time was anchored, was she?

 A. No, sir.
- Q. How long did she remain in the locality of the point of the collision before you took any affirmative action to get away from it?
 - A. From 3:16 until 3:57.
- Q. Do you think you stayed in the place of collision all that time?
 - A. No, but we were not very far from it.
- Q. You did not stay in the place of collision all that time though?
- A. No. We separated quite a little bit but not very far.
 - Q. Would the swell of that day have any tendency

to take you away from the point of the collision?

- A. It did. It set us away a little all the time.
- Q. And there was this other unknown force that was moving the "Beaver"?
- A. Something was swinging her to port, I don't know what it was.
- Q. There were two forces there that might have moved the "Beaver" from the point of collision?
 - A. There were.
- Q. And you don't know how much she was moved, if she was moved at all?
 - A. Oh, I know she was moved.
- Q. I say, if she was moved at all, you don't know how much she was moved.
 - A. I would not say how much, no.
- Q. Do you know, Captain, how long it was before Captain Lie came on to the "Beaver"?
 - A. No, I would not say how long.
 - Q. Do you remember when he came on?
- A. Very well. He came in one of the last boats. He came, I think, in the last boat—no, he did not come in the last boat. I think the last boat went out to get the men who were swimming. He was in the other boat. His crew was practically all aboard before he came. His wife and his children came in his own little boat. His Chinaman [773—650] came in another boat. He came in the third boat, I think, if I can remember right, but he was one of the last ones to come aboard anyway.
- Q. It was a good three-quarters of an hour after the collision, was it not?

- A. Oh, no, not so much as that.
- Q. He did not come right from the "Selja" to the "Beaver," did he?
- A. If I can recollect it, from the time he was picked up in the water, he came right direct to the "Beaver."
 - Q. From the time he was picked up?
 - A. Yes, sir.
 - Q. He was in the water, was he?
- A. He jumped into the water and they picked him right up.
- Q. He did not reach the "Beaver" before the "Selja" sank, did he?
- A. No, I don't think he did. I would not be sure about that, but I don't think he did.
- Q. So it was sometime after the collision that Captain Lie came aboard?
 - A. It was sometime before he came on board, yes.
- Q. Do you remember that Captain Lie was in the boat that went around to pick up the other men who were in the water?
- A. He might have been; I don't recollect whether he was, or not.
 - Q. At any rate, that was the last boat that came?
- A. I think that was the last boat that came, the one that picked the men up in the water.

(A recess was here taken until 2 P. M.) [774—651]

AFTERNOON SESSION.

WILLIAM KIDSTON, cross-examination, resumed:

Mr. McCLANAHAN.—Q. Captain Kidston, what would you have done had you heard two whistles from the "Selja" instead of the one whistle which you heard?

- A. I probably would have slowed and stopped until I located what position she was in.
- Q. Do you remember answering that question before the inspectors? Let me refresh your memory.
- A. I think I do. I think I said that I would retain my course.
 - Q. Let me read this to you:

"Inspector BOLGER.—Q. Suppose you had two signals from the 'Selja' what would you have done? A. I would have kept my course. I would probably slow down and proceed cautiously but would not have stopped and backed."

- A. Yes, I remember that.
- Q. That was your judgment of what you would have done when asked the question three days after the collision? A. Yes.
- Q. What is your opinion as to the cause of this collision?
 - A. You want me to tell you what I think?
 - Q. Yes, Captain.
- A. Primarily the cause was fog; secondarily, because the "Selja" was lying still in the water and not blowing two whistles, whereas it was blowing one, giving me the impression that he was under way.

- Q. That is your belief as to the cause?
- A. That is my candid belief as to the cause.
- Q. I believe it is your theory or belief, that at the time [775—652] of the impact the "Beaver" had stopped her way through the water; am I correct?
- A. I did say so; I am still practically of the opinion that her way was stopped in the water. She might have had a little headway but I did not think so, but she might have.
- Q. In your opinion she did not have enough headway to have punched that hole in the side of the "Selja" 10 or 12 feet?
- A. I think that that hole in the "Selja" was caused more by a chop along with what little headway she might have had than it was by a direct ram.
- Q. Do you not think the speed of the "Beaver" would have caused that hole through a direct ram, as you call it?
 - A. It might. I might be mistaken. It might.
- Q. What do you mean by your use of the word "chop"?
- A. To me, looking right over the bow at the time of the collision—practically my whole attention was right on that at the time—we seem to have raised on the swell and as we came down on the swell again that was the time of the collision, and in coming down she chopped right into the side of the ship.
 - Q. Do you think the "Selja" was anchored?
 - A. Not at all I don't think so.
- Q. Do you think the "Selja" was being affected by the swell also? A. I think so.

Q. Is it your theory that the swell brought the ships together?

- A. I am not theorizing at all. I am just telling you what it looked to me at the time.
 - Q. Well, it is your belief?
- A. No, I did not say it is my belief that the swell brought the ships together.
- Q. I am asking you if that is what you meant by the use of [776—653] the word "chop," that it was the action of the swell on the two vessels that brought the "Beaver" down on the "Selja"?
- A. I think the "Selja" had just about rolled in the swell as we had been up on it and coming down.
- Q. Then it was the reverse action of the swell on the two boats that brought them together?
- A. It may have had some bearing on it; I don't know.
- Q. Well, that was your theory, was it not, before the inspectors?
- A. I don't just recollect whether I said said that was my theory before the inspectors, or not. I don't recollect that. Maybe I did.
- Q. Well, don't you recollect that that was the theory of your report?
- A. I remember—now, let me see—yes, in my report, yes, that is right, I did say something about that in my report.
- Q. Do you know that that is the theory of some of your officers who have testified at this hearing?
 - A. Yes, I think I did hear some of them say that.
 - Q. You are still of the opinion that that might

have been the cause of bringing the boats together?

- A. I am still of the opinion that the swell might have been some cause—might have been.
- Q. Can you reconcile that opinion with the statement that you have made that the "Selja" at the time of the impact was nearly headed into the swell?
 - A. I certainly could.
 - Q. You do reconcile them? A. Yes, sir.
- Q. Referring now to your ship's log, this over-run of the log in this amount depends upon the condition of the weather, does it not?

 A. And the currents.
- Q. So that you cannot do more than estimate or judge or pass [777—654] judgment on the amount of it over-runs—you cannot be exact?
- A. Not excepting where we have good departure from one point to another. For instance, if we had taken a departure in clear weather from Pt. Reyes, and the distance is 67 miles, and we had run until we had Pt. Arena abeam, and the log had over-run half a knot an hour in that time, I would readily be able to calculate what she was over-running; and under conditions of the weather at that time, that and the current, I would judge them from past experience if I met it again what my log should do.
 - Q. But where you don't have the two points?
- A. If I am running a log for a year and I have kept correct tab of that log when I have had these departures, it is the only way in which we can navigate on the coast in foggy weather, to begin with, knowing your ship's compass, knowing your ship, knowing your log, having a record of the errors of your log

under certain conditions, and having a good local knowledge of the conditions of the weather and the currents on the coast. It is the only way in which a man can navigate on the coast in foggy weather—that and the help of his sounding-lead which on this coast is not a very good one.

Q. It still remains, however, an uncertain quantum, the log over-running or under-running depending on the condition of the sea.

A. It is not such a great uncertainty, no, sir. Figuring it down to a percentage, I allow on certain kinds of sea and weather 4 per cent on our log. I may either increase or diminish that according to the state of the weather. But I must be pretty accurate, and every other man that navigates ships on this coast must be pretty accurate in knowing what his log does or he would not be able to navigate safely.

Q. Do you make any entry in your log-book of the run as shown by the log? [778—655]

A. Oh, yes; that is, I don't make it, my officers make it. They take a reading every two hours.

Q. What was the run as shown by the log on the way back to San Francisco on the day of the collision?

A. We did not make any entry of that.

Q. Why not?

A. Well, I will explain to you why that was not done. It could have been done later on, only I did not permit it to be put in. After we started from the wreck back the log was streamed and left set on exactly the amount that was on it when it was taken

in, at 19.6. At 5:03—yes, at 5:03 we heard the United States Revenue Cutter "McCullough's" whistle. had been in communication with her by wireless and she came laying around the light-ship and had started north, in case I needed assistance. At 5:03 we heard her whistle. I did not know it was her whistle until later on; she came in sight a minute or so afterwards, and I slowed and then stopped and when I stopped I told the officer to send a man and haul the log in, not knowing how long I was going to be stopped and I did not want the log to be fouled, which is a customary thing to do when you stop in case you have to back. After I had spoken to the "McCullough" and we got under way again the officer asked me if he would stream the log and I said "no, never mind streaming the log, we only have a mile and a half or two miles to the light-ship, we will hear the whistle in a minute." That is the reason why the log was not streamed again, and that is the reason why we omitted putting down what the log showed when we got to the light-sbip.

- Q. Then you don't know what the log showed?
- A. At that time I don't know what the log showed.
- Q. Was the weather foggy at the time you heard the "McCullough's" first whistle? [779—656]
- A. Yes, but not very foggy. It was not very thick right then, but it was foggy though.
 - Q. How far could you see?
- A. Oh, I don't know, but somewhere inside of a mile.
 - Q. How many whistles did you hear from the "Mc-

(Testimony of William Kidston.) Cullough" before you saw her?

- A. Maybe 2 or 3 or maybe 4 whistles.
- Q. Where were they blowing from?
- A. I think about right ahead, or maybe a little on the port bow—the first whistle.
- Q. Why didn't you stop your engine when you first heard the whistle of the "McCullough"?
- A. I did not think it was necessary, I thought I could see far enough ahead.
 - Q. You thought there was no danger of collision?
- A. No, because I had been speaking to her; I knew she was coming up. She had been talking to me by wireless all the time and I knew it was the "McCullough."
- Q. Well, Captain, suppose you did know it was the "McCullough," was that any reason for not stopping your engines?
- A. We were not going very fast. I had slowed my engines. I had the ship under perfect command.
 - Q. You did not stop, Captain, did you?
 - A. No, I did not stop.
- Q. And you did not stop because you felt there was no danger of collision?
 - A. I felt there was no danger of collision.
- Q. And you felt that the rule did not apply—is that what you thought, Captain, because you were in no danger of collision?
- A. Well, I was in distress, Mr. McClanahan; I was [780—657] coming into port with what might be a sinking ship; I didn't know whether her collision bulkhead would hold, or not.

- Q. How near to the light-ship did you pass?
- A. I would say not over a ship and a half's length off the light-ship; I had her on my starboard beam.
- Q. Captain, did you ever stop your engines on hearing a first fog signal forward of the beam?
 - A. Many times, many times.
- Q. What were the circumstances of some of the occasions, why did you stop?
 - A. Because I heard the whistle.
- Q. You heard whistles on the 22d of November, 1910, and you didn't stop?
 - A. The conditions did not warrant me to do so.
- Q. I want to know what the conditions were when you have stopped your engines on hearing the first whistle?
- A. A very thick fog and a certain condition of weather, a heavy wind, that I was not able to locate it very well, and it was safer to stop than to proceed.
- Q. In other words, you always stop when the weather is of such a character and the wind is such that you think danger of collision exists, and then you stop?
- A. Yes, and I have often stopped when I did not judge there was danger of collision; I have often stopped.
 - Q. What for?
 - A. Well, I have done it, that is all; I done it.
 - Q. You had no reason for doing it?
- A. I suppose I might have had at the time; I cannot recall just what times it was. I have got a reason for doing everything—primarily.

Q. Why did you put your engines at half-speed on the way back [781—658] and keep them there for 9 minutes?

A. I started first at a slow bell. I had an officer who reported to me the condition of the collision bulkhead; I didn't know how much of the bow was stove in, and then I put her at half-speed.

Q. Why didn't you know how much of the bow had been stove in and why didn't you know the condition of the collision bulkhead before you started back?

A. I did know that the collision bulkhead was not sprung before we started back, by an examination made by the carpenter, first officer and chief engineer, but after we started back I didn't know what effect that would have—the pressure, if there was a big hole in the bow, or the collision bulkhead, and I wanted to try it. So I first started with a slow bell and then I started with a half-speed bell, and after we were going awhile on that half-speed bell the first officer went down with the carpenter and sounded the tanks and looked over the bulkhead and reported to me that everything was in good condition, that there was no water, that she was not making any water. Then I sent for the chief engineer and I told him that on account of night coming on I wanted to get into port, if possible, that it was foggy, and a rough bar; I knew all this; and that I would hook her on full speed but for him not to press her too hard, somewhere around 74 or 75 turns.

(Testimony of William Kidston.) was a verbal message to him. I sent for him on the bridge.

- Q. That was her full speed, was it?
- A. That was her full speed, that I would ring her full speed but not to press her too hard.
- Q. Half-speed would be a little more than half of full? [782—659]
- A. At half-speed they might have been turning up 50 turns.
- Q. Ordinarily, Captain, when you telegraph down half-speed, it is a little more than half of full?
- A. Yes; well, we cannot regulate it on a ship like that; a slow bell was anywhere between 20 and 30 or 35 turns, and half-speed would be about 50 turns.
- Q. So that it runs a little more than the actual half of full? A. Yes.
- Q. You are familiar with the Pt. Reyes whistle, are you—you heard it blow? A. Yes, sir.
 - Q. Often?
- A. Well, I have not heard the new one blow very often because it had not been established so very long then.
- Q. There has been a change in the Pt. Reyes whistle, has there not? A. Yes, sir.
 - Q. It used to blow every 70 seconds?
 - A. The steam-whistle, I believe it did.
 - Q. The steam-whistle did? A. Yes, sir.
 - Q. And this is a steam-siren now?
 - A. Yes, sir.
- Q. The whistle has been changed and the interval of the sound has been changed too? A. Yes.

- Q. It blows 35 seconds now? A. No, it does not.
- Q. What is the length of the blast now?
- A. If my memory serves me right, I think it is 2 seconds.
 - Q. The intervals I mean?
 - A. Oh, the intervals, yes.
 - Q. The intervals is 35 seconds.
 - A. I think maybe it is, yes.
 - Q. And the former interval was 70 seconds?
 - A. Yes, sir.
- Q. The new whistle, the steam-siren, was on Pt. Reyes when you had the collision?
- A. I could not tell you whether it was a steamsiren or a compressed air siren. [783—660]
 - Q. Well, the change had been made?
 - A. The change had been made, yes.
- Q. You were on the "Beaver" on her trial trip, as I understand it, Captain? A. Yes, sir.
- Q. I want to ask you to verify some data which I gave to the experts used by me in this case, if you can.
- At I don't think, Mr. McClanahan, that I can verify anything because on the trial trip the ship was in the hands of the builder and I was only there as a guest.
- Mr. McCLANAHAN.—I would like to have from you, gentlemen, a further admission in regard to this data. I think that you can make it safely, and I know you will if you can. I would like to have you admit that the builders of the "Beaver" if called would testify that this data is correct.

Mr. DENMAN.—You mean by that the data shown

(Testimony of William Kidston.) on the blue-prints?

Mr. McCLANAHAN.—I think so, yes. I will read you the data I gave the experts. I am reading from the testimony of W. E. Dickie, page 188 of the record:

"The speed of the 'Beaver' on her trial trip is said to have been 17.6 knots per hour; her draught on the trial trip was 13 feet 9 inches forward and 17 feet aft, and her corresponding or mean displacement at those draughts was 4400 tons. Her indicated horse-power is 4448, and the revolutions on the trial trip, the maximum revolutions, were 86. You may assume also that her displacement fully loaded on a mean draught of 19 feet 6 inches would be 5950 tons. You may assume that the pitch of her propeller on her trial trip was 22 feet and 3 inches, and you may also assume that that [784—661] vessel's displacement on November 22d, 1910, on a draught of 16 feet $4\frac{1}{2}$ inches was 4800 tons."

Mr. DENMAN.—That would be her mean draught?

Mr. McCLANAHAN.—Yes, that would be her mean draught.

Mr. DENMAN.—I cannot say as to admitting those facts, Mr. McClanahan, because I don't know whether they are true, or not. The data that we have here is extremely meagre. I have been unable to make any final determination of these matters since the time you have had the experts on the stand. As a matter of fact, my own mind was not illumined as to

its importance until you had them here. We will consult with the builders and advise you concerning that just as soon we can get word back.

Mr. McCLANAHAN.—I will say, Mr. Denman, that all of this data I think appears on your blueprints furnished by your builders.

Mr. DENMAN.— I do not think it does. I am not sufficiently qualified to pass on those blue-prints but my own search of the blue-prints indicates that they do not.

Mr. McCLANAHAN.—You will get that word as soon as you can, will you?

Mr. DENMAN.—As soon as I can. But I understand that that will not affect the closing of the case, that particular matter?

Mr. McCLANAHAN.—No.

- Q. Captain, what was the highest speed the "Beaver" made on her trial trip?
- A. My knowledge is only hearsay knowledge told to me by the officials of the building company who were taking that data.
- Q. Well, let us have it, whatever it was. [785—662]
 - A. They told me that she made 17.06 knots.
 - Q. You were on the ship at the time, were you?
 - A. I was on the ship at the time.
- Q. Don't you know what her draught was on that occasion?
- A. I did not know it at the time but I would not be positive about it now.
 - Q. Is my statement, 13 feet 9 inches forward and

17 feet aft, does that refresh your memory?

- A. It seems about it, it seems about in that neighborhood; I would not be positive though. It seems to be in that neighborhood, however.
- Q. Would the information of the blue-prints which show that to be her draught, would that refresh your memory so you could testify positively on that subject?
- A. No, I would not testify positively as to the draught.
- Q. Not even after you have inspected the blue-prints and found the draught on the blue-print also?
- Mr. DENMAN.—Q. Did you put the draught on the blue-print, Captain? Did you have anything to do with the drawing of the blue-print?
 - A. No, I did not.
- Mr. McCLANAHAN.—You would not say it Captain, even after looking at the blue-print?
- A. No, but it seems to me it is in that neighborhood. But I would not be positive.
- Q. Do you know her corresponding displacement?
 - A. You mean to that draught?
 - Q. Yes. A. No, I never figured it out.
 - Q. And you did not know it at the time?
 - A. No, sir.
 - Q. Do you know her indicated horse-power?
- A. Her indicated horse-power was 4000 or 4200, I forget which. [786—663]
 - Q. Was it not 4448?

San Francisco & Portland Steamship Co. 927 (Testimony of William Kidston.)

A. That may be; I am not positive on those points.

Q. Do you know what her maximum revolutions were on the trial trip?

A. They told me that the highest she attained was 86 revolutions.

Q. What was her displacement fully loaded on a mean draught of 19 feet 6 inches?

A. I never worked that up so I could not tell.

Q. You know the pitch of her propeller on the trial trip to have been 22 feet and 3 inches, do you not?

A. I was told so. I never have worked up the pitch of the propeller.

Q. Do you know the displacement of the ship on November 22d, 1910? A. No, sir, I do not.

Q. Do you know her draught?

A. I know what her draught was.

Q. What was her draught?

A. 14 feet and 3 inches forward and 18 feet 6 inches aft.

Q. That would be a mean of 16 feet $4\frac{1}{2}$ inches?

A. Yes, sir.

Q. This data which I have been talking about is data that you ought to know as master of the ship, is it not, Captain?

A. No, sir, I don't think so.

Q. If you had occasion to use that data, would you not turn to the information furnished to you by the builders and take it as authentic?

A. I would.

Mr. McCLANAHAN.—I think I will introduce in evidence the blue-prints furnished by the Newport News Shipbuilding & Drydock Company to the claimant in this case, being dated February 8, 1910, and consisting of four sheets of paper, purporting I suppose to be the data for the trial trip. I ask that [787—664] it be marked Libelant's Exhibit 20.

Mr. DENMAN.—We object to the introduction of this evidence on the ground that it is hearsay, and on the further ground that without further identification as to who made it and from what it was made up and by whom; it is immaterial, irrelevant and incompetent.

Mr. McCLANAHAN.—I would like to have the record show that the blue-print has been furnished to me by the attorney for the claimant.

- Q. Captain, the "Beaver" has the same officers that it had at the time of the collision, with the exception of yourself?
 - A. No, I don't think so.
 - Q. What changes have been made?
 - A. I think the third officer is not there.
- Q. The first officer is there and the second officer is there?
- A. The first assistant engineer is not there. Of the deck officers, the third officer is not there; in the engineer's department, I think two of the engineers are not on the ship now.
 - Q. Do you know where they are?
 - A. I think one of them is chief engineer of the

"Kansas City." I don't know where the other is. He may be there, but I don't know. That is my impression.

- Q. Do you know what engineer was on duty in the afternoon of November 22d?
- A. Up until 4 o'clock the second assistant engineer was on duty.
 - Q. He is still on the "Beaver"?
 - A. I think he is still on the "Beaver."
- Q. What is his name? A. Townsend. [788—665]
- Q. Now, Captain, we will do a little map work, with your permission. Here is a map of Drake's Bay, which I suppose you recognize, Captain?
 - A. Yes.
- Q. An authentic, well-recognized map of that bay, it is not? A. Yes, sir.
- Q. Now, Captain, I want you to be very careful, if you please, in the work that I am going to ask you to do. I want you to place on that map the point of collision as shown by your bearings; do you remember what the bearings were?
 - A. I am just trying to think; I have them.
- Q. Now you have the Pt. Reyes bearing, have you? A. Yes.
- Q. Now, will you please draw a line from Pt. Reyes, along the ruler.
 - A. (Witness does as directed.)
- Q. Now, get your south end bearing. Now you have your rule on the south end bearing, have you?

- A. Yes, sir.
- Q. Please draw a line that intersects with the former bearing. A. (Witness does as directed.)
- Q. Now, the intersection of those two lines is the point of collision as shown by your bearing; is that correct? A. That is correct.
- Q. Will you please mark the south end bearing, the compass direction of it on the line.
 - A. (Witness does as directed.)
 - Q. That is northwest half north, is it?
 - A. Yes, sir.
 - Q. Now, will you mark the Pt. Reyes bearing.
 - A. (Witness does as directed.)
 - Q. That is northwest by west half west?
 - A. Yes, sir.
- Q. Now, Captain, will you please put a point on this map 2½ miles from Pt. Reyes, it being the point that would intersect [789—666] your north 86 west course; do you understand what I mean? A. I understand what you mean.
 - Q. Will you please do that.
- A. It would be the point that should have been if I had a railroad track to run on and the ship didn't get off it; it is the point that I aimed for in setting my course.
- Q. Well, please put that on the map; its value will be discussed later.
- A. Any old woman could navigate a ship if all she had to do was to set a course and she knew she would get there, and that there was nothing in the way, that there was no fog.

- Q. Captain, you have made a cross on the map on a line which extends from Pt. Reyes 2½ miles to the southward? A. That is the position which—
 - Q. Just answer the question.
 - A. I have made a cross.
- Q. Will you please locate, if you can, on this map, the Duxbury whistle.
- A. I don't think I will locate it on this map for you.
 - Q. Why not? A. Do you see it here?
 - Q. No, it is not here. Can't you locate it?
 - A. Not on this map I cannot.
 - Q. You see the end of the reef, don't you?
 - A. Yes.
- Q. And don't you know how far it is from the end of the reef, or in what direction?
- A. Yes, but it is not there though. If you give me the chart that it is on I will locate it, but not on this one.
- Q. It is not my fault, Captain, that it is not on this map. A. I am sure it is not mine.
- Q. Then using Libelant's Exhibit No. 2, Captain, will you please locate the Duxbury whistle on the map we are working at.
 - A. (Witness does as directed.) [790—667]
- Q. Now, you have made a cross, Captain, have you, at a point on the map which would be Duxbury whistle; is that correct, Captain?
 - A. I consider it correct.
- Q. Now, will you please make a point to the southward from Duxbury buoy one-half mile.

- A. (Witness does as directed.)
- Q. The second cross that you have made is where the "Beaver" passed the Duxbury buoy on that afternoon? A. No, I don't think so.
- Q. Well, that is half a mile to the southward, is it not?
- A. That is a half mile off where the reef buoy is, but I did not say that when we were abeam we were south of the buoy.
 - Q. Where were you?
 - A. I will tell you in a minute.
 - Q. That is what I want to get at.
- A. We were steering degree courses; I have to guess a degree on here.

Mr. DENMAN.—Q. Captain, it is north 4 east?

- A. It is not north 4 east. I know what I am doing. This is part of my business and I know what I am doing. I don't want any interference from anybody.
 - Q. Please accept my apology, Captain.
 - A. It's accepted.

Mr. McCLANAHAN.—Q. Captain, I have erased the first line you drew south of the buoy and you have put in its place a line on which you have made a cross which shows the correct bearing that you were from the buoy when you were passing; is that correct, Captain?

A. Yes, I think that is correct. There is one question I would like to ask you; why couldn't you give me an extended plan, a chart like this all the way through instead of giving [791—668] me a

chart that I have to go from one to the other on?

- Q. I would have done it, Captain, if I knew where I could get one. This is the only large chart of Drake's Bay that I could find.
 - A. There are two or three places that sell them.
 - Q. Larger than this? A. Yes.
- Q. All the reason I don't use Libelant's Exhibit 2 is the chart on which I am examining you now is because it is so much smaller than the one we are using?
- A. It makes it a little more complicated to be transferring from one to the other.
- Q. But you have done it correctly, have you not, Captain?
- A. Well, I may have made a little error, I don't know.
 - Q. Not a conscious error?
 - A. Not a conscious error.
- Q. We will mark the cross which you have designated as the location of the buoy with a "B"; we will mark the cross below the "B" which you designate as the place where you passed it, as "C." Now, Captain, referring again to the position or point that you have made $2\frac{1}{2}$ miles to the south of Pt. Reyes, will you please go over that and see if it is correct. I think there may be an error there.

Mr. DENMAN.—Do you mean the distance or the angle?

Mr. McCLANAHAN.—The angle, an error in the angle.

Q. (Continuing.) What I want, Captain, is your

The state of the state of

(Testimony of William Kidston.) distance abeam on that course.

- A. All right, now I will give it to you.
- Q. Now, will you measure the line that you have drawn $2\frac{1}{2}$ miles, Captain, and there we will place a cross.
 - A. (Witness does as directed.) That is abeam.
- Q. Now, with your permission, I will rub out the first bearing and line, and we will mark this line that you have made "Pt. Reyes 2½ miles abeam." We will mark the Point itself "D." [792—669] Now, Captain, will you please draw a line from point "C" to point "D."
 - A. (Witness does as directed.)
- Q. Now, Captain, will you please the line you have drawn from "C" to "D"—"north 86 west"?
- A. Hold on a minute; I don't know whether it is, or not.
 - Q. Well, see if it is.
 - A. Yes, that is north 86 west.
 - Q. Just mark it, please.
 - A. Yes, north 86 west Magnetic.
- Q. Now, Captain, will you please mark on the north 86 west line the point of collision if the "Beaver" was making 11 knots from Red Buoy No. 2?

Mr. DENMAN.—I would suggest that Red Buoy No. 2 does not appear on this chart.

Mr. McCLANAHAN.—Q. It can be done, Captain, can it not?

A. Yes, but I will have a lot of trouble to do it. It cannot be done on this chart unless you paste a

(Testimony of William Kidston.) piece of paper on it.

- Q. You can't put the Red Buoy on?
- A. I cannot extend it.
- Q. But you can tell how far the Red Buoy is from the point "C", can you not? A. I can.
- Q. And then you can tell how many miles or knots that is, and where the ship would be if she were going 11 knots per hour?
 - A. I certainly can.
- Q. You will accommodate me, Captain, if you will just do that for me.
- A. Only if I do so it will not be right; 11 miles an hour from Red Buoy will not be right, it will not give us any location where I would say she was.

Mr. DENMAN.—It is just a theoretical question, Captain.

A. A theoretical question, oh.

Mr. McCLANAHAN.—Q. You mean to say that the point of [793—670] collision as shown by the 11 knots would not be the correct point of collision—is that what you mean to say?

- A. That is what I mean to say.
- Q. I am not asking you to commit yourself to that, Captain. I am simply asking you where the point would be if the vessel travelled 11 knots from Red Buoy. She travelled an hour and a half then, did she not?
 - A. No, she travelled more than that.
 - Q. Did she travel more than that?
- A. Let me see, from 1:45 to 3:15—yes, that is right.

Mr. DENMAN.—I object to the question upon the ground that the testimony does not show that the vessel travelled at the rate of 11 knots from Red Buoy.

Mr. McCLANAHAN.—Q. Now, answer my question, Captain.

A. She was 30 minutes from Red Buoy to Duxbury; that is going at $5\frac{1}{2}$ knots.

Q. No, 6½ knots, is it not?

A. No, 11 knots an hour, that would be $5\frac{1}{2}$ knots in 30 minutes. The distance from Red Buoy to Duxbury was $6\frac{1}{2}$ miles, so she was just a mile from Duxbury in the half an hour. I have not got this on the chart—yes, I guess I can get at it. That is 11 knots an hour from Red Buoy No. 2. It may be a little out (indicating).

Q. I will mark the point on the north 86 west magnetic course which you say would be the 11 knots from Red Buoy No. 2. I will mark that "E." That would be the point of collision if the vessel was making 11 knots? A. From Red Buoy.

Q. Now, will you please give me the point of collision as shown by the run of the log from Red Buoy No. 2 without any deduction. [794—671]

A. (Witness does as directed.)

Q. Now, we will mark the distance run by the log as shown by you on the north 86 west magnetic "F." That is the distance without any deduction—is that right, Captain?

A. That is correct.

Q. Now, Captain, will you please, from the point of collision as shown by the bearings which you took,

which I will mark "G," will you please run a course south 65 east from Pt. Reyes to the point of collision. A. That is Pt. Reyes.

- Q. I want you now to bring your ruler to the point of collision as shown by the bearings. Now, draw a line from your point of collision shown by the bearings along the ruler there and pass Pt. Reyes.
 - A. (Witness does as directed.)
 - Q. Now, mark that line please, "south 65 east."
 - A. Yes.
- Q. Now, will you please draw the same course running through the eleven knot point made on the map? A. Yes, sir.
 - Q. Now, draw a line there. A. How far?
- Q. Just as far as you can over Pt. Reyes, using that ruler. A. I can extend it.
 - Q. Now, mark that "south 65 east" please.
 - A. Yes, sir.
- Q. Now, will you draw the same course from the point as fixed by your log, Point "F," and mark that "south 65 east." Yes, sir.
- Q. What is the distance, Captain, from point "D" to point "F"? A. 51/4 miles.
 - Q. What is the distance from point "D" to "G"?
 - A. 53/4 miles.
 - Q. What is the distance from "D" to "E"?
 - A. $7\frac{1}{2}$ miles.
- Q. When you speak of "miles" you always mean nautical miles? A. Nautical miles. [795—672]
- Q. Now, to make the record clear, Captain, the distance from "D," which is abeam from Pt. Reyes

(Testimony of William Kidston.) to "F" is 51/4 miles?

A. It is less than a quarter. I will measure that again. It is $5 \frac{1}{16}$.

- Q. Well, do you wish to change your first measurement to 51/16? You said before it was $5\frac{1}{4}$.
 - A. Yes, that was wrong if I said it.
 - Q. It is 51/16? A. Yes, sir.
 - Q. "F" being the point shown by the log?
 - A. "F" being the point shown by the log.
- Q. The distance from "D" to "G," which is the point shown by your bearings, is 5\% miles?
- A. Yes, sir, that is right—no, hold on a mintue, let me see that.
 - Q. That will have to be changed too?
 - A. That is right, anyhow, that is 53/4.

Mr. DENMAN.—Q. Is that exact, Captain, or is it a little over or a little under?

A. A little over, a thirty-second.

Mr. McCLANAHAN.—Q. The distance from "D" to "E," which is the 11-knot point, is $7\frac{1}{2}$ knots?

- A. Yes, sir, 7½.
- Q. What is the distance from south N to point "G," that being the northwest half north bearing?
 - A. $4\frac{1}{2}$ miles.
- Q. What is the distance from Pt. Reyes to point "G," being your northwest by west half west bearing? A. 61/4 miles.
- Q. Will you please give me the distance from the line connecting Pt. Reyes with "D" to "G" along the south 65 east course. A. 6½ miles.
 - Q. I will mark the end of that line you have just

measured "H." What is the compass bearing of the line from "D" to Pt. Reyes? [796—673]

- A. It is about north a quarter east; it is a little more than a quarter. The degrees are not there. It is a trifle more than a quarter.
- Q. Well, for all practical purposes, it is north a quarter east? A. Yes, for all practical purposes.
- Q. Is it a quarter of a point or a quarter of a degree.
- A. A quarter of a point. It is a little more than a quarter.
 - Q. That would be north about 3 degrees east?
 - A. No, north about 4 degrees east, I should say.

Mr. McCLANAHAN.—I offer this map in evidence and ask that it be marked "Kidston's Libelants' Exhibit, Kidston 1."

Redirect Examinatiou.

Mr. DENMAN.—Q. In your examination by Mr. McClanahan, it was brought out that you had swung a number of points after the time that the full speed astern signal was given; you mentioned what points —do you recollect?

- A. I said between 5 and 6. I was not positive.
- Q. Are you accurate that it was 5?
- A. No, I am not accurate that it was 5.
- Q. Could it be less than 5? A. It might be.
- Q. Could it have been more than 6?
- A. I don't think it could be more than 6.
- Q. Could it be as low as 3?
- A. No. It could be less than 5 but I don't think more than 6.

Q. Could you say somewhere in between 3 and 6, or 4 and 6?

Mr. McCLANAHAN.—I object to the leading questions being asked the witness.

Mr. DENMAN.—Q. What I want to get at is, Captain, did you take any accurate observation?

A. No, I did not. I said in answer to Mr. Mc-Clanahan's question between 5 and 6; [797—674] now, I say it may be less than 5 but I don't think more than 6. How much less than 5 I don't know.

Q. You detailed us a conversation that occurred on the bridge of the "Beaver" after Captain Lie came up there. Did it impress you as rather strange that he should tell you the number of minutes he had been lying at a standstill? How did that come about in the course of the conversation?

Mr. McCLANAHAN.—I object to this as being improper redirect examination.

Mr. DENMAN.—This matter was gone fully into on the cross-examination.

A. The volunteer statement that Captain Lie made at that time did impress me as extraordinary, but I accounted for it in this way: he was very much excited, the man had been overboard, he just lost his ship, and after I had sympathized with him for the loss of his ship, I was sorry that it occurred, it impressed me as though he was trying to tell me that it was not his fault—the collision was not—in other words, I figured that he was trying to impress me that it was my fault, and to do so he told me that he had been lying dead still in the water for over 10 min-

utes and had heard my whistle. That is the impression it gave me at the time.

- Q. Did it make any difference to you as a matter of wrongdoing whether he laid there for one minute or 10 without blowing the two-whistle signal?
- A. No, it would not have made any difference whether he had been there one minute or 10 as long as he was not complying with the two-whistle rule.
- Q. You say that you came to my office in the month of January; did you bring any witnesses there?
 - A. Yes, sir. [798—675]
 - Q. How many—about how many?
 - A. 5 or 6; I forget which now; maybe it was 5.
 - Q. Were there others sent there, do you know?
 - A. Yes.
 - Q. About that time?
 - A. At or about that time.
- Q. Do you recollect at the hearing before the inspectors, that the inspectors called for further evidence from the "Selja" and that Mr. McClanahan took certain action in response to that request?

Mr. McCLANAHAN.—I object to that as immaterial.

A. Yes, sir.

Mr. DENMAN.—Q. What did Mr. McClanahan say, if you recollect?

Mr. McCLANAHAN.—I object to that as immaterial.

A. I don't recollect his exact words, but I know that Mr. McClanahan refused—I think it was about the Chief Engineer—he refused to put on any more

witnesses anyhow. I think it was the case of the Chief Engineer that Mr. Bulger asked him for.

Q. Do you recollect this conversation occurring on Friday afternoon, November 25th, 1910, at the offices of the United States Inspectors?

"Mr. McCLANAHAN.—I think we have given our statement sufficiently.

Inspector BOLGER.—Have you any objection to putting anybody else on the stand?

Mr. McCLANAHAN.—Yes, simply because it is not necessary to put them on the stand in this hearing.

Inspector BOLGER.—I would like to know if his engine was stopped, according to the log? [799—676]

Mr. McCLANAHAN.—I prefer not to have any of the witnesses put on for the Norwegian ship.

Inspector BOLGER.—We got part of it.

Mr. McCLANAHAN.—You got all of it. Well, I have said my say, I don't propose to put on any more witnesses. They can give you no more light than you have; I examined them and I know.

Inspector BOLGER.—According to that we are not competent, but we have been handling these cases for over twenty years. We think the engineer is essential in this case.

Mr. McCLANAHAN.—You have the evidence."

Do you recollect that?

1 = 3 = 10

(Testimony of William Kidston.)

A. Yes, sir, I recollect most of that.

Mr. McCLANAHAN.—I ask that all that be stricken out as immaterial, irrelevant and incompetent.

Mr. DENMAN.-Q. Was Captain Lie put on the stand after that, as a matter of fact?

- A. Not to my knowledge.
- Q. When was the hearing resumed, do you recollect? A. On Monday, I think.
- Q. Do you recollect my attempting to get permission of the inspectors to put questions directly to the witnesses?

Mr. McCLANAHAN.—I object to that as immaterial; it is not proper redirect examination.

- A. I remember that. I remember that the inspectors told you that any questions you had to ask the witnesses to ask it through them and they would put the questions.
- Q. Do you remember that there were several questions put in writing by each of the counsel?
 - A. Yes, I recollect that.
- Q. You were speaking of the effect of a current on the log and on the ship; now, as compared to distances shown on shore, and on the log, the current would have an effect on the comparison, [800—677] would it not? For instance, suppose a definite measured course on shore, and a current in which the ship and the log are floating, the current would cause a difference between the reading of the log and the actual true distance traveled, would it not? might add or might subtract from the distance?

- A. I don't understand what shore-measurement you are referring to.
- Q. Suppose you are passing known fixed points on shore. A. Oh, yes, passing fixed points.
- Q. And that your log is out, and that there is a current against which you are traveling. Now, as between the actual distance and the distance shown by the log, the log will differ from the actual distance, will it not? A. It certainly should.
- Q. The ship and the log, however, are floating at the same rate in the current, are they not?
 - A. They are.
- Q. What do you say as to the variation between the log and the distance shown by the engines? Will the current affect that to any appreciable extent?
 - A. It will.
 - Q. To an appreciable extent?
 - A. Not to a very great but it will to some extent.

7. 4.4 74.6

- Q. How do you account for that?
- A. If you have a strong current with your ship—I have had a current with the ship where the slip was negligible.
- Q. That is, the slip as compared with the shore line or fixed points? A. Yes, fixed points.
- Q. I am presuming now that you cannot see any fixed points and that you are floating in the fog. Will the current which is carrying the ship along and carrying the log along at the [801—678] same time, presuming now you were in the current and you were not moving at all, the ship and the log would presumably float at the same rate through the cur-

rent? A. If attached to each other, yes.

- Q. Now, presume that you are going ahead, would the current affect the log any more than it would the ship, as you move through the current?
 - A. With the current against us or with us?
 - Q. Well, either way.
 - A. It will affect the log more than it will the ship.
 - Q. Aren't you both moving at the same rate?
 - A. They are both moving.
- Q. Is not the log moving at the same rate as the ship—supposing you are in smooth water now?
- A. Yes, sir. The log is going through the water and is being dragged at the same rate as the ship, but the action of the current—the rotator is revolving quicker with the current against it than if there was no current.
 - Q. How do you make that out, how can that be?
- A. Well, I don't know, but that is my theory from experience, that the current makes the log over-run the ship's distance more than it would than if there was no current against it.
 - Q. You refer to fixed points on shore?
- A. Without any points, without fixed points on shore. I am referring to fixed points by the sun from one day's run to another, by observation. In many places in mid-ocean where we have strong currents we fix the ship's position by observation of the sun from noon one day until noon the next.

(An adjournment was thereupon taken until tomorrow, Saturday, July 22, 1911, at 11 A. M.) [802—679]

Saturday, July 22d, 1911.

[Testimony of John K. Bulger, for Claimant.]
JOHN K. BULGER, called for the claimant
"Beaver," sworn.

Mr. DENMAN.—Q. What is your occupation?

- A. United States Local Inspector of Steam Vessels.
 - Q. How long have you held that position?
 - A. Close on to 21 years.
- Q. Your duties involve the investigation of accident cases and the investigation of the acts of licensed officers on steam vessels, the examining and licensing of officers, and particularly engineers?
 - A. Yes, sir.
- Q. Do you recall the collision between the steamer "Beaver" and the steamer "Selja" in the month of November, 1910? A. Yes, sir.
- Q. Do you recall a conversation, or did you have any conversation with Captain Lie of the steamer "Selja," on or about November 25, 1910, the day of the investigation before you as to the causes of that collision? Did you have any conversation with him?
 - A. As to the causes of the collision?
 - Q. Yes.
- A. I had a conversation with the Captain in the morning when he came into the office.
 - Q. What was that conversation?
- A. I could not recollect it verbatim but it was in relation to the investigation, asking him to appear there as a witness, with the officers of his vessel. As I recollect it he told me that there was to be an in-

(Testimony of John K. Bulger.)

vestigation before his consul. I asked him if he would telephone and see if we could set the case for that day. We set the case, as I recollect it, for one P. M. or 1:30 P. M.

- Q. Are you speaking of the Norwegian Consul?
- A. I could not say. [803—680]
- Q. Some foreign consul? A. His consul.
- Q. During the course of that conversation did he say anything about the circumstances leading to the collision?

Mr. McCLANAHAN.—I object to the question. Captain Bulger is now engaged in telling the conversation, let him exhaust his memory.

- Q. Can you tell the conversation, Captain?
- A. To the best of my recollection I will tell you just what happened; it is brief.
 - Q. That is what we want.

A. I spoke to the captain. I cannot tell you the exact words, but when we got to a point where the captain told me that he had been stopped for 10 minutes, I asked the captain if he was blowing his whistle; he said yes, that he was blowing a fog whistle. At that point I said to the captain, "We don't wish to take any advantage of you, Captain, I think it would be advisable for you to have your attorney here to represent you." The captain went away and returned in the afternoon with Mr. Mc-Clanahan as his attorney.

Mr. DENMAN.—Q. Is that all there was to the conversation?

A. That is all I can recollect at this present

(Testimony of John K. Bulger.) moment but I can continue about what happened if you want the rest of it.

Q. I am speaking about the conversation in the morning. How long did he say the "Selja" had been stopped?

A. He told me the "Selja" had been stopped 10 minutes.

- Q. And was it a fog-signal that he had given?
- A. Yes, a fog-signal; he was blowing his fog-signals.
 - Q. Did he say how many whistles he blew?
- A. No, sir, not that I can recollect just at this time. I [804—681] took the fog-signal for to be one signal; that is, he told me that he was blowing fog-signals.

Cross-examination.

Mr. McCLANAHAN.—Q. Did he say or did you understand clearly what he meant by the statement that the "Selja" had been stopped about 10 minutes, Captain? Did you understand that he meant that the "Selja" was dead in the water or that her engines had simply been stopped?

A. When I get it from the bridge that a ship is stopped I take it that she is stopped through the water. When I get it from the engine-room I take it that her engines are stopped. I would think that when the captain said his ship was stopped that her headway was stopped.

Q. That is what you thought?

A. That would be my opinion, taking it from the master's standpoint. But from an engineer's stand-

(Testimony of John K. Bulger.)

point, without his engines had been reversed, I would take it that his engines had been stopped but not the headway of the ship.

- Q. So that when you got this information from Captain Lie, you understood that it referred to the stoppage of the "Selja" headway through the water?
- A. Yes, sir, and I thought he was blowing the wrong signal at the time, and as soon as I thought that I told him to get an attorney there to represent him. That is the reason I told him to get an attorney, so that everything would be fair—that is all.
- Q. You felt that this was a dangerous statement for the captain to make?
 - A. I did feel that; that is, taking him unawares.
- Q. You thought that if he had stopped the headway of his ship for 10 minutes he was grossly in fault for not blowing two whistles? [805—682]
 - A. That is my opinion of it.
- Q. Did he say when the stoppage of the "Selja" had taken place?
- A. You mean at the time that he conversed with me?
 - Q. Yes. A. No, sir.
- Q. He just said that the "Selja" had been stopped for 10 minutes? A. Yes, sir.
- Q. But did not place that particular stoppage, that is, as to the time, he did not say when it was ?
 - A. Not to the best of my recollection.
- Q. Do you remember where that conversation took place?
 - A. Yes, it took place in the consular building, just

(Testimony of John K. Bulger.)

- Q. And it was at that time then that he opened up and told you that the "Selja" had been stopped for 10 minutes?
 - A. I asked him; I asked him what she was doing.
 - Q. Oh, you asked him for an account of it?
- A. I asked him. He never made any admissions to me.
- Q. What was your object in asking him in this informal way for an account of the accident?
- A. Well, everybody is supposed to make a report, you understand, and in lieu of the report I asked him the questions. All licensed officers make a report first but he not being under our jurisdiction did not make a report. He did not have to make a report. I asked him to make a report and to bring his logbooks there.
 - Q. This was before the investigation commenced?
- A. Yes, I just had a few words with him, as I tell you.
- Q. I want to know why, before the investigation, you were asking him for an account of the accident. Was it in order to assist you in the hearing that was to follow?

 A. Not necessarily.
- Q. Well, what was your purpose—I don't know what it was.
- A. It was just an offhand question. The captain of that ship was not on trial before me. I had nothing to do with him. I told him that at the time. I had nothing to do with the captain there because he is foreign to our rules and regulations. I merely wanted him in the case as a witness against the cap-

(Testimony of John K. Bulger.) tain of the "Beaver." [808—685]

- Q. You wanted to get information from him that would assist you in passing upon the merits of the matter at the hearing?
 - A. Well, not necessarily.
- Q. Whether necessarily or not, did you not want to get information to help you in the case?
 - A. To help me in the case?
 - Q. Yes.
- A. No. I can pass on a case without getting assistance from the outside.
- Q. Well, Captain, don't you get all the information you can get in passing upon a case?
 - A. Before the case commences, do you mean?
 - Q. At any time.
- A. We like to get all the information we can at the start, no matter what source we get it from.
- Q. And was not with a view of getting all the information you could about the case, that you had this conversation with Captain Lie?
 - A. I don't think so at that time.
 - Q. Well, what was your object in doing it?
 - A. What was my object?
- Q. Yes, why did you ask Captain Lie these questions about the collision?
- A. In just an offhand manner—that is all. I was not trying to elicit anything from him at all.
- Q. No, I don't say that you were; but do you mean to say that you did not have in mind the advantage that that information would give you when you sat in judgment on the case? Didn't you have that in

- Q. Bearing on the case itself and on the fault for the collision?
- A. Well, the fault of the collision—we never got that far in the case, because he refused to testify any further and we could not get his logs; we could not get his statements, we could not get anything else on account of the advice of his attorneys—to arrive at a conclusion—or his attorney, rather.
- Q. You have not answered the question, Captain. Please answer the question. I will have it read to you.

(Question read by the Reporter.)

It was an important admission, was it not, Captain, bearing on the case itself and on the question of fault?

Mr. DENMAN.—You mean whose fault?

Mr. McCLANAHAN.—Anybody's fault.

Mr. DENMAN.—It is presumed that there is but one fault [811—688] in the case.

A. I cannot answer that question.

Mr. McCLANAHAN.—Q. You have just told me that this was a dangerous admission that he was making to you. In what way was it dangerous? It bore directly, did it not, on the question of the fault for the collision itself?

- A. If he was to have admitted it on the stand, yes, sir.
- Q. It bore directly on the question of the fault for the collision?
- A. It would have if he had admitted it, which he refused to do.

San Francisco & Portland Steamship Co. 957 (Testimony of John K. Bulger.)

- Q. You say that he refused to make this admission on the stand? A. Yes.
- Q. The captain was put on the stand, then, that day?

 A. He was put on the stand as a witness.
 - Q. And he was sworn? A. And he was sworn.
 - Q. And gave testimony?
 - A. And gave testimony.
 - Q. And you asked him questions, did you not?
 - A. I did.
- Q. You asked him questions with reference to the stopping of the "Selja," did you not? A. I did.
 - Q. And with reference to his blowing two whistles?
 - A. Yes, sir.
- Q. Captain, you have said that he refused to produce his log; did he not produce his log?
 - A. His engineer's log.
 - Q. Did he not produce the ship's log?
 - A. The engineer's log is what I am talking about.
 - Q. He refused to produce what?
- A. The engineer's log of the ship, and refused to allow the Chief Engineer to testify so that I could cross-examine him.
- Q. You mean, then, that he refused to produce the engineer's log? A. Yes, sir. [812—689]
 - Q. But he did produce his own log?
- A. I think it was produced there, or an abstract of it; I think so.
 - Q. Is not your memory good?
 - A. Well, it is pretty fair.
 - Q. Only fair? A. Just at this time, yes.
 - Q. Only fair at this time?

A. Yes, sir. I will tell you one thing, anything I tell you in the case will be strictly honest. I am not influenced in the case. Nobody can influence me, either. I merely say this: That I am here as a witness in the case to tell you just what happened on that day. That is all.

Mr. DENMAN.—Mr. McClanahan is not accusing you, Captain.

The WITNESS.—I am not saying that he is.

Mr. McCLANAHAN.—Well, don't get excited, Captain, we will get along nicely. Don't you remember that you read this log of the captain's which he had produced as his sworn statement of the collision?

- A. That I read it?
- Q. That you read it.
- A. I don't recollect reading it. I recollect seeing an abstract of it.
- Q. I refer you now to the transcript of the evidence, page 1, at the bottom, where it says, "Inspector Bulger read abstract from the log of the steamer 'Selja' and afterwards the statement of Captain Kidston of the steamer 'Beaver.'" That is where you get your cue that you read an abstract, is it?
- A. I beg to call that—that is a clerical error in there.
 - Q. What is?
- A. Putting Inspector Bulger there instead of Inspector Bolles. I never read the master's abstract of the log of the ship or asked him any questions on it.

- Q. Well, whether that be so or not, let us turn to pages 30 [813—690] and 31 of the transcript of the evidence, and I will ask you if that is not the document which was read either by you or by Inspector Bolles. A. What paragraph?
 - Q. The whole business, pages 30 and 31?
- A. I will say that it was introduced in evidence, but I never read it.
 - Q. Well, it was read in your presence?
- A. I don't think so. I will let the captain answer that and if he says yes, I will admit.
- Q. Well, it was read in your presence. I was there.
- A. Well, if that is it, if I can't recollect it I will say yes, that is all. I don't recollect it, though.
 - Q. You don't recollect it being read?
- A. No, sir. These statements are put in and copied and put in as part of the evidence. I never recollect ever reading that statement or that I heard it read.
 - Q. Or having heard it read?
 - A. Or having heard it read.
- Q. However, if I state to you as between man and man that it was read, and that I heard it, and that you were there—
 - A. (Intg.) I won't dispute it.
 - Q. You won't dispute it? A. No.
- Q. It is simply a lapse of memory—that is all, is it not?
- A. A lapse of my memory, if anything, yes. If you were there and heard it read and if you went on

the stand and said it was read I would not dispute you on it. But I never read it, or heard it read, to the best of my knowledge.

- Q. How does it come that it is in a copy of the transcript of the proceedings that you have in your possession now and that you are examining? [814—691]
- A. Because it was introduced in evidence in the case.
- Q. Introduced as evidence in the case, and you never read it?

Mr. DENMAN.—Do you mean before or after that morning?

Mr. McCLANAHAN.—Just excuse me, Mr. Denman; I will deem it a great favor if you will keep out.

- A. I will answer the question: I never read it, to the best of my knowledge, and being that it is right in here, too.
 - Q. You never read it?
- A. To the best of my recollection. I don't say I did not, but to the best of my recollection I never read that in the transcript there, in the back of it. But I read the proceedings in the case.
- Q. That is a remarkable statement for you to make, is it not, inasmuch as you were a judge in that case?
 - A. It is remarkable, yes, sir.
 - Q. Because you were sitting as a judge in the case?
 - A. Yes, I was.
- Q. And it is very important, is it not, a sworn statement coming from one of the officers in the case?
 - A. This statement is important if introduced in

the case relating to the other people, the "Selja's" case. But when they refused to testify I eliminated all their testimony so far as I was concerned, and I said so on the stand at the time. When they refused to let me bring the chief engineer there to crossexamine him, to get notes from him as to whether the engines were stopped, or not, we dealt alone with the captain of the ship on the evidence that was given. There was no evidence given against the captain of the ship, against the chief engineer, nor was his log produced that I asked for, for the simple reason that I wanted to cross-examine the captain, and when it came to the point that I asked for the engineer's log to [815-692] be produced there to find out the speed of the ship, whether she was going full speed, or stopped, or backing, or anything else, you refused to allow any of them to testify. You refused to allow the chief engineer to testify. On that point I dropped the "Selja" end of it and took the testimony that is in here—against the captain or for the captain—whichever it was, that is, the testimony up to that without taking those into consideration. Possibly if the evidence had been kept up or been given by this captain and his engineers of the "Selja" it may have put a different phase on the case.

Q. So, as I understand it, Captain, when you were refused by me the opportunity of examining the chief engineer of the "Selja," you then from that time eliminated from the proceeding and the hearing all the evidence that had been given prior to that by

(Testimony of John K. Bulger.)
Captain Lie and his third officer?

- A. No, sir, I beg your pardon. It is in the minutes up to this time, the captain's statement.
- Q. What was it you said you did eliminate after you were refused the opportunity of examining the chief engineer?
- A. I had nothing to go on; we had to eliminate everything then.
 - Q. That is what I am saying.
- A. We had nothing to go on. If the chief engineer had produced his log-book and shown the speed of the vessel, and had given me a chance to find out the facts of the case, I don't know what would have happened.
- Q. You eliminated, then,—because of that refusal by myself—all of the evidence you had heard given by the "Selja's" officers?
 - A. What else could I do?
 - Q. Well, that is what you did?
- A. That is what I did, yes, so far as I am personally concerned. What Captain Bolles did [816—693] is another consideration.
- Q. And also, by that same process, you eliminated all consideration of the "Selja's" log which had been introduced?
- A. Personally I did, yes, but Captain Bolles is the man who took that part of it into consideration.
- Q. You had not forgotten, Captain, had you, when you were examining Captain Lie under oath, that he had made a statement to you a few moments before that, that the "Selja" had stopped, as you under-

stood it, her headway in the water for 10 minutes—you had not forgotten that when you were examining Captain Lie, had you?

A. No, I had not forgotten it but I know what he testified to afterwards because I have the notes here.

Q. I am going to read what he testified to and see if you have a recollection of having heard that testimony. This examination which I am now about to read, is your own examination of Captain Lie.

Mr. DENMAN.—Are you sure of that, Mr. Mc-Clanahan, or was it by Mr. Bolles?

Mr. McCLANAHAN.—It was by Mr. Bulger.

Mr. DENMAN.—I want to make certain that you are getting the right inspector.

Mr. McCLANAHAN.—I don't want to take any advantage of you, Captain Bulger.

The WITNESS.—I will answer your question, Mr. McClanahan.

Mr. McCLANAHAN.—Qt Yes, all right, but I want to put Mr. Denman on the right track. I am going to commence to read at page 9, the second to the last question from the bottom of the page. You asked Captain Lie these questions and he gave these answers to you:

"Q. If you were stopped 5 minutes why didn't you blow two whistles?

A. Because she was going ahead yet. [817—694]

Q. When the engines are stopped, does the law say you shall blow two whistles? A. No."

Mr. DENMAN.—There is something omitted in

between there, you are not reading it all.

Mr. McCLANAHAN.—I will state for your benefit, Mr. Denman, that I am reading only the examination pertaining to the stoppage of the "Selja" and the failure to blow two whistles.

Mr. DENMAN.—But you are taking out of sentences. It is running along here sentence for sentence and one fits the other.

Mr. McCLANAHAN.—I am reading only the evidence pertaining to the question of stoppage and the question of blowing two whistles.

Mr. DENMAN.—Well, all the evidence there refers to the time of stoppage.

Mr. McCLANAHAN.—Well, you can take that up on redirect examination, I don't like to be interrupted.

Mr. DENMAN.—I am simply calling the attention of the witness to the fact that you are not reading all the testimony to him.

Mr. McCLANAHAN.—If you put the transcript in the hands of the witness he can probably call that to his own attention.

Mr. DENMAN.—He can't do that and also listen to you while you are reading the questions.

Mr. McCLANAHAN.—"Q. Your vessel is practically stopped at that time?

A. No, as soon as my vessel has headway I cannot blow three whistles'—I think that is an advertence, I think it refers to two whistles.

Mr. DENMAN.—That is not part of the testimony, is it?

Mr. McCLANAHAN.—No, that is my remark.

- "Q. Your engines were stopped 5 minutes and you still had [818—695] headway on the ship?
 - A. Yes, sir.
- Q. How fast were you going through the water?
- A. 3 or 4 knots. She would not slow herself in 5 minutes. She will only swing around, a tramp like that. Her power at stern is not full enough.
- Q. You did not consider it necessary to blow two whistles that your engines were stopped?
- A. I just told the third officer to hold on the two whistles until I told him.
- Q. Was she on the point of stopping? A. As I said before, when I blowed three whistles I was then at the point of blowing two whistles to show that I had stopped. Then the steamer looked up and she blowed three whistles at same moment, then I backed engines and blowed three whistles.
- Q. Why didn't you back when you heard the vessel approaching?
- A. Because I was still—I was just moving a little. Too, I was navigating as carefully as I could because I did not want to alter my course on a whistle. I never alter my course on a fogwhistle. I would sooner stop my vessel. I could see three ship-lengths. I was quite certain I could stop my vessel before the other would

run into me, if she was in the same speed.

- Q. Do you think if you had blowed those two whistles when you stopped it would have avoided the collision? A. I don't know.
- Q. How many whistles did you hear on the 'Beaver'?
- A. I heard nearly 15. I heard whistle of 'Beaver' at 3 o'clock.
 - Q. How long after that did you stop?
 - A. I stopped 10 minutes later.
- Q. When you heard that whistle, if you had given two whistles that you were stopped, do you think the collision would have been averted?
- A. I don't know, because I [819—696] could not blow two whistles.
 - Q. You could blow your fog-signals?
 - A. Yes, sir.
- Q. When you blow fog-signals you are under way? A. Yes, sir.
- Q. When you blow two whistles you are stopped? A. Yes, sir.
- Q. When you blow two whistles your ship is stopped through the water? A. Yes, sir. That means the ship is done in the water.
- Q. How long would she run after your engines were stopped? A. About 5 minutes. I was going to blow three whistles. I gave three to back her. She was stopped at the moment I gave three whistles.
- Q. When you stopped your engines dead still, you are virtually stopped?

A. We are not allowed to blow as soon as we stop our engines. We may be going 15 or 20 knots."

Do you remember that testimony?

- A. Nearly all of it, yes.
- Q. Now, do you remember just at that point, that Inspector Bolles turned to you and said, "When she is stopped through the water, when there is no way on her"; do you remember that? A. Yes.
- Q. Do you remember, Captain, that you were a little confused as to the meaning of the rule?
 - A. It looked that way, yes.
- Q. It looked that way, and Bolles was setting you right in the matter?
 - A. Yes. I have a right to continue now haven't I?
- Q. Yes, I am not going to stop you. Now, do you see any evidence at all in that record of a present recollection on your part—present at that time—of this statement that Captain Lie had made to you a few minutes before?

A. Just exactly the point where I had it too. I knew that if I could get the engineer's log and verify the 10 minutes I didn't want to go any further. I called for the log of the [820—697] engineer and wanted to put the engineer on the stand at that time for the simple reason to find out how long those engines had been stopped, and taking the difference of time between that and the collision and finding out whether the statement he had previously made to me was correct, or not. That was my object.

Q. What was your object in not asking him directly

(Testimony of John K. Bulger.)
under oath whether his previous statement was correct, or not?

- A. Asking the captain under oath?
- Q. Yes.
- A. I had asked him that right in your questions there, how long his ship was stopped. I did not say to him on the stand that you told me this morning that you had been stopped for 10 minutes.
 - Q. Why not?
- A. Because I was waiting for to get the engineer's log. Every man has his own way of conducting a case, and I was waiting. That was my main point. Just at that point I called for the engineer's log and wanted the engineer to appear on the stand either to verify this or sustain the captain.
- Q. You did not want then that Captain Lie should be given an opportunity himself on the stand of making some explanation that would reconcile his statement of the morning with the sworn statement, but you preferred to catch him by calling for the log—is that the idea?
- A. I did not prefer to catch anybody. I supposed that the log would show facts. Without asking questions and without producing logs you cannot get at facts. I have not anything against Captain Lie, or anything favorable to anybody else.
- Q. Suppose the log had been produced, and it had not shown that the ship had been dead in the water for 10 minutes before the collision? [821—698]
 - A. I would have accepted it.
 - Q. You would have accepted the log?

- A. I would have accepted the log.
- Q. Will you tell me how the engineer's log of the "Selja" would show that she was stopped in her headway through the water for 10 minutes?
 - A. I would have asked the engineer if—
 - Q. (Intg.) I am talking about the log?
- A. Well, I would have to ask the engineer about the log. I would have taken the log and I would have asked him, in this log was this time put down as you received the bells from the bridge? How long does it take you to stop your headway on that vessel? If those engines had been stopped for 15 or 20 minutes, or for 10 minutes,—I don't know when she will stop her headway, I have no knowledge of it up to this time; I might have if I had the engineer's evidence. Without it nobody alive could tell whether she would run 4, 5 or 6 miles, or 2 miles. But if I had that, I could verify the evidence in the case and would know what I was talking about.
- Q. That is, you mean to say that the engineer only can tell when the ship has lost her headway?
- A. The engineer and the master are the only ones in the country who could tell that.
- Q. Now, leave out the master. You say the engineer is the only man who would know that?
- A. He is the only man who would know what the engines could do.
- Q. No, not the engines but the ship, how long it would take the ship to lose her headway.
- Mr. DENMAN.—He said the captain and the engineer.

Mr. McCLANAHAN.—Mr. Denman, please don't interrupt me.

Q. Didn't you say that no man in the country but the engineer [822—699] would know?

A. Yes, I said it. The engineer would know what his engines were doing.

Q. I am asking you about how long it would take the ship to stop her headway; would the engineer know that?

A. The master of the ship would know it. He said he was looking over the rail and was waiting, with the mate's hand on the whistle, to see her headway stop in the water before he would blow the two whistles.

Q. How were you going to get from the engineer's log any data which would enable you to contradict or confirm Captain Lie's statement about the "Selja" having been stopped in her headway for 10 minutes?

A. When the captain got on the stand he said her headway was nearly off after 5 minutes. I wanted to get the bells from the engineer to find out at what time—we had the time from the captain—to find out at what time the bells were rung to the engine-room and then take the difference between the time and see whether that was correct, or not.

Q. How were you going to find out from that?

A. The captain's statement that the headway was dead in 5 minutes, and whether the bells were given 5 or 10 minutes before, or an hour before was the point I wanted to get at. I didn't know anything about it.

- Q. You were quite provoked, were you not, because of the refusal of Captain Lie's counsel to put the engineer on the stand?
 - A. What do you mean by "provoked"?
 - Q. Piqued, angry?
 - A. Why should I be angry?
- Q. I am asking you the question whether you were, or not.
- A. No, I was not angry then, no more than I am at the present time.
 - Q. You are not angry now, are you? [823-700]
- A. To your thinking I might be. I would like to have had him on the stand to find out the cause of the collision and how it happened.
- Q. Had you not had the log of the officers of the ship? A. I did not have the engineer's log.
- Q. No, you did not have the engineer's log, but you had the log of the ship.
 - A. Have I the right to ask you a question?
 - Q. I can't prevent you from asking me questions.
- A. I don't know whether it would be a point well taken, or whether I have any right to ask it. I would like to ask you a question.
- Q. You had also the statement under oath of Captain Lie, and the opportunity to cross-examine, did you not?
 - A. Captain Lie refused to answer later on there.
 - Q. The Captain refused to answer what?
- A. He refused to answer one question in the case when we could not get the engineer's log.
 - Q. What did he refuse to answer? You said the

captain refused to answer. You meant the captain of the "Selja." What did he refuse to answer?

- A. He refused to produce the engineer and the engineer's log-book, by advice of his counsel. Is that correct, or not?
 - Q. That is correct.
 - A. Well, to my mind that is a refusal.
- Q. There was nothing he refused to answer, was there?
- A. That is a refusal so far as I would take it. To answer his own questions, no, he did not refuse.
- Q. You also had the opportunity to examine and did examine [824—701] the third officer of the ship, who was on the bridge at the time of the collision; do you remember that?
 - A. Just read it there.
 - Q. Let me read you some of his testimony.
- A. I heard the testimony of every witness who was on the stand.
- Q. I will read you the testimony of Third Officer Bjorn on this question of the speed of the "Selja."
 - A. What page is it on?
 - Q. It follows right after Captain Lie's testimony:
 - "Q. Was your vessel stopped before the collision?
 - A. Yes, sir, it was dead slow. Asked Captain if I should give three whistles."

And I again say here for myself, Mr. Denman, that I think that should be two whistles, that is a clerical error.

"But Captain said he is going little ahead be-

cause there was heavy swell from astern.

Q. She was forging through the water? A. She was moving little ahead. I asked Captain if I should blow three whistles—and I again say that that should be two whistles. He said, no, as she had way on."

And then a question by Mr. Bolger:

- "Q. How long time was it from the time your ship stopped her engines until the collision occurred?
- A. It was stopped about 3:10; collision occurred at 3:15 or 3:16.
- Q. What speed was 'Selja' going when engines stopped?
 - A. Not very much, she was dead slow.
 - Q. How many knots would that be?
 - A. I should judge 3 or 4."

Did you, when you examined Mr. Bjorn at that time, have in mind this admission, this dangerous admission, which Captain Lie had [825—702] made to you out in the hallway?

A. Not after Captain Lie's statement that he was there for 5 minutes. I had no way for making a verification. And I will tell you right now that Captain Lie made that statement to me or I would never have made it. I had it noted on the day that he made it to me in the office. And further than that, I will let him answer the question himself whether he said it, or not, and I will take his word for it right now.

Mr. DENMAN.—Q. Captain Lie is right here now

in front of you, is he not, Captain Bulger?

A. Yes, that is Captain Lie (pointing). I will take his word for it.

Mr. McCLANAHAN.—Q. Captain Bulger, what do you mean by that? Do you mean you may be mistaken?

- A. No, I am not mistaken.
- Q. Well, why would you take his word for it?
- A. I will take his word for it. If he says I am mistaken, let him say it. The reason I say that is that I would not accuse anybody unless I was correct about it, that he made that statement.
- Q. I didn't quite understand your statement that you would take his word for it. Do you mean by that, that if he says he never made that statement to you, that you would believe him?
 - A. No, I could not say that.
 - Q. Well, what did you mean?
- A. Well, I think he is an honest man and I think he will tell the truth. That is exactly what I mean by it. I think he would tell the truth; I think he is an honest man, and I would depend on him.
- Q. My question is, Captain, what did you mean by saying that?
- A. I mean to say this, that the man will admit that he told me that. He may have made a mistake when he told it to me. How about that? [826—703]
 - Q. Is that a question to me? A. Yes.
- Q. I think it would have been a very great mistake if he ever made that admission to you.
 - A. Well, he may say he made a mistake, or that

he didn't say it.

- Q. You see, Captain, sometimes we get to thinking about a matter that is suggested to us perhaps, and thinking it over and pondering over it until we begin really to believe something that never existed.
 - A. I don't; I am not one of those kind.
 - Q. You are not? A. No, sir.
 - Q. Didn't you ever hear of that phenomena?
- A. I know lots of people who believe lots of things that they hear.
- Q. Now, here are two honest men, you and Captain Lie, and I assure you that you are going to clash and be diametrically opposed in your statements as to that conversation. I do not want to say that you are wilfully misstating it.
 - A. I don't think you could say that.
- Q. And therefore I am suggesting to you that there is a natural phenomena that takes place sometimes in the human mind. We dwell upon a thing that never happened so long until we finally believe it did happen?
- A. Yes, I have come in contact with a great many of that class in my time. I merely come here to make a statement of what was told to me on that morning to the best of my knowledge and belief, and I have sworn to under oath, and it is a fact. That is all there is to it. Whatever bearing it has on the case, pro or con, it does not make any difference to me. [827—704]
- Q. And it didn't matter to you at the hearing, did it?

A. That is an absurd question. I wanted to get all the information I could. I want to call your attention to one thing, I have been at that office for 21 years and nobody can impeach me for not getting at the facts of a case and dealing honestly with them.

Q. We know you have a remarkable reputation for that.

A. Oh, I am not looking for any reputation, but I know that that is correct.

Q. You have not any further explanation, Captain, than that which you have made, as to why, when you had the opportunity of examining Captain Lie under oath, and of examining his third officer, you did not refer to this conversation—to the statement in the conversation which had been made to you but a few minutes before?

A. It was not a few minutes before, it was in the morning and this was in the afternoon—two hours.

Q. Well, with that correction, you have not any further explanation to make of why you did not refer to it?

A. No, because I thought the witnesses who would follow would bring out the full explanation of everything, if any explanation was to be made. The stopping of the engineer from producing his logbook and letting me look at it and giving his evidence, did not look just to be right to me at the time so I quit. Not having anything to do with the "Selja" we proceeded with the case of the officers of the steamer "Beaver" for the collision.

Q. You knew, did you not, that Captain Lie was

there out of courtesy to your office in giving his testimony?

- A. Yes, he was there out of courtesy. I found that out afterwards. I thought we had a right to subpoena him. [828—705]
- Q. And you know that his third officer was put on the stand out of courtesy?
- A. Just let me ask you a question: Was there any discourtesy shown to Captain Lie when he was on the stand in my office?
- Q. You want me to answer that perfectly frankly, Captain? A. Yes, I do.
- Q. I believe Captain Bulger, that you were very discourteous to Captain Lie.
 - A. In what way.
- Q. Just wait a moment. You have asked me a question and I am going to answer it. And that was the reason why I refused to allow any more of the "Selja's" officers to be examined.
- A. I am surprised to hear you make that statement. With a man of your reputation as an attorney in this town you cannot verify it.
- Q. Well, you asked me the question and wanted an answer and I want to give it to you straight.
- A. Yes, I did. I have been badgered more here to-day than ever Captain Lie was on the stand.
- Q. You should not be so offended when you sought my answer.
- A. Oh, I am not offended, this will soften up in a few minutes.

Redirect Examination.

Mr. DENMAN.—Q. Captain Bulger, is it possible that Mr. McClanahan's expression of irritation on your part comes from the fact that you recognized there was some discrepancy in the Captain's statement between the morning and the afternoon and possibly you might have been a little more severe on him?

- A. I was not severe on him. I get the facts wherever I can, I don't care how I get them. Some people object to direct questioning—
- Q. (Intg.) You did know there was a discrepancy at the time [829—706] you examined him, did you?
- A. I did, yes, sir. That is the reason I wanted to put the engineer on. I could not accuse the captain. The captain might have come in there in his excitement and said 10 minutes when he meant 5, or said 20 minutes when he meant 10. I told him I wanted to deal fairly with him and not take advantage of him, and I told him to get an attorney. I asked him if he wanted to bring charges against the captain and he said no.
- Q. Mr. McClanahan not only refused to put the engineer on but said that that was all the evidence he would give, did he not? Let me read you the words.
 - A. I don't know that I could recollect them.
 - Q. Do you recollect the following:

"Inspector BULGER.—I would like to have your chief engineer.

Mr. McCLANAHAN.—I think we have given

our statement sufficiently.

Inspector BULGER.—Have you any objection to putting anybody else on the stand?

Mr. McCLANAHAN.—Yes, simply because it is not necessary to put them on the stand in this hearing.

Inspector BULGER.—I would like to know if his engine was stopped, according to the log.

Mr. McCLANAHAN.—I prefer not to have any of the witnesses put on for the Norwegian ship.

Inspector BULGER.—We got part of it.

Mr. McCLANAHAN.—You got all of it. Well, I have said my say, I don't propose to put on any more witnesses. They can give you no more light than you have; I examined them and I know. [830—707]

Inspector BULGER.—According to that we are not competent but we have been handling these cases for over twenty years. We think the engineer is essential in this case.

Mr. McCLANAHAN.—You have the evidence."

And further on:

"Inspector BOLLES.—How long does it take the 'Selja' to stop, when the engines are stopped from full speed?

A. I could not say anything about it at all.

Inspector BULGER.—The engineer could

tell us that."

Do you recollect that? A. Yes, sir.

- Q. Was that the occasion when you desired to put the engineer on so you could further cross-examine Lie after you had gotten that testimony?
- A. That was my intention, sir, which I have always done.
- Q. And that was the evidence- you referred to when you said you wanted to put the engineer on?
 - A. Yes.
- Q. And those were the statements that were made at that time? A. To the best of my recollection.

Recross-examination.

Mr. McCLANAHAN.—Q. Captain, don't you remember that all of the possible witnesses for the "Beaver" were not put on?

- A. Well, I didn't know that.
- Q. Didn't you know that? A. No.
- Q. Let me read this to you:

"Inspector BOLLES.—(To Captain Kidston.) Was your quartermaster on the bridge, Captain? A. Yes, sir.

Q. Captain Kidston, could be give us any further information different from what these people have said?

A. I don't think he can give you any information any different from what you have heard, Captain." [831—708]

- A. Well, that was up to Captain Bolles, I have nothing to do with that.
- Q. So there came a time when you did not believe it necessary to put on other witnesses from the "Beaver." A. I say that is up to Captain Bolles.

- Q. Why, do you make a distinction between Captain Bolles and yourself—is he your superior?
 - A. No, sir, I don't think so.
 - Q. You are of equal rank? A. Yes, sir.
 - Q. Your position is a political one, is it not?
 - A. No, sir, I beg your pardon.
 - Q. Who are you appointed by?
- A. Appointed by the Civil Service Commissioner—appointed by the Secretary of Commerce and Labor.
 - Q. You are appointed—
 - A. (Intg.) Civil service examination.
- Q. You are appointed after a civil service examination?

 A. After a civil service examination.
 - Q. But you are appointed, are you not?
 - A. There are no politics in it.

(The further hearing of this matter was thereupon continued until Monday, July 24, 1911, at 11 A. M.) [832—709]

Monday, July 24th, 1911.

[Testimony of E. B. McClanahan, for Claimant.]

E. B. McCLANAHAN, called for the claimant "Beaver."

Mr. DENMAN.—I will waive the oath being administered to Mr. McClanahan.

- Q. Mr. McClanahan, you have just heard read to you the following:
 - "Q. You know, did you not, that Captain Lie was there out of courtesy to your office in giving his testimony?
 - A. Yes, he was there out of courtesy. I

(Testimony of E. B. McClanahan.)

found that out afterwards. I thought we had a right to subpoena him.

- Q. And you know that his third officer was put on the stand out of courtesy?
- A. Just let me ask you a question: Was there any discourtesy shown to Captain Lie when he was on the stand in my office?
- Q. You want me to answer that perfectly frankly, Captain? A. Yes, I do.
- Q. I believe, Captain Bulger, that you were very discourteous to Captain Lie.
 - A. In what way?
- Q. Just wait a moment: you have asked me a question and I am going to answer it. And that was the reason why I refused to allow any more of the 'Selja's' officers to be examined.
- A. I am surprised to hear you make that statement. With a man of your reputation as an attorney in this town you cannot verify it.
- Q. Well, you asked me the question and wanted an answer and I want to give it to you straight.
- A. Yes, I did. I have been badgered more here to-day than ever Captain Lie was on the stand.
- Q. You should not be so offended when you sought my answer. [833—710]
- A. Oh, I am not offended, this will soften up in a few minutes."

You recollect that, don't you, last Saturday?

A. Certainly. I recollected it without having it read to me.

Q. And your statement here now is what you believe to be the true reason why you failed to put the engineer on the stand?

A. Absolutely—what is that, failed to put the

engineer on?

Q. That was the only witness they asked you to

put on?

A. All my witnesses for the "Selja," all the officers, were present at that hearing, out in the hall, and it was my intention to put them on if they desired them on.

Q. That was the only witness they asked you to put on, was it not, in addition to the evidence they already had?

A. I think they asked to have the Chief Engineer

called.

Q. That was the only witness they asked to put on, the Chief Engineer; just answer my question yes or no.

A. I think it was. The reason why they did not ask for the others was that I refused to allow any more to be examined.

Q. And that was the reason, was it? You are sure of that, are you? A. What was the reason?

Q. The reason you have just stated now. It is sometime ago, you know, Mr. McClanahan, and I want to give you a chance to make certain in your own mind that that was the reason. Did you have any other?

(Testimony of E. B. McClanahan.)

- A. Let me ask you, Mr. Denman, what is the materiality of this examination?
- Q. I want to show that you are mistaken when you say that is the reason.
- A. Well, suppose I was or am mistaken, what is the materiality?
- Q. It would be a matter for the Court to decide. Certainly you are not going to refuse to be cross-examined on a thing that you interjected into the record? [834—711]
- A. Well, I might, unless I can see that it is material. I certainly shall unless it is material.
- Q. I intend to show that the reason stated on Saturday was not the reason, that there is another reason, and a very significant reason with reference to this case, which I propose to bring out if you allow me to question you further. Of course, you can refuse if you want to.
- A. Well, that does not appear to be material, whatever my reason is.
- Q. Well, if it is not material I will agree to strike it from the record.
 - A. I don't know that it ought to go in the record.
 - Q. Was there any other reason, Mr. McClanahan?
 - A. I do not recall now that there was any other.
- Q. Of course, that was a pretty important point in the taking of the testimony, where the engineer was called for, was it not?
 - A. What was an important point?
- Q. The moment in the taking of the testimony in which the engineer was called was an important

(Testimony of E. B. McClanahan.) point with reference to developing the case so far as the "Selja" was concerned, was it not?

- A. I did not consider it so, no.
- Q. Let me ask you, you remember Captain Lie testifying that it would take 5 minutes for the vessel to stop through the water after the engines were stopped, when going at a 3-knot speed, do you not?
 - A. Let me see it.
- Q. I say you recollect his testifying to that, do you not? A. I don't believe I do.
- Q. Let me call to your attention the fact that he did?
- A. That is what I want you to do. I don't think I recollect his testimony on that point. [835—712]
- Q. That was the whole thing that was in dispute at that time, was it not? The whole question in dispute was whether or not the "Selja" was stopped and had not given a 2-whistle signal; that was the point in dispute, was it not? That was the particular point on which they were interrogating Captain Lie.
- A. There was a time when they were interrogating him on his failure to blow two signals; I don't know that that was in dispute at all.
 - Q. It was not a matter of dispute?
- A. Why no. Captain Lie never said that he was at a standstill.
- Q. Mr. Bulger said that he told him so in the morning, did he not?
 - A. Do you ask me what Bulger said?
 - Q. Mr. Bulger said that, did he not? A. Yes.
 - Q. Don't you recollect that you read into the rec-

(Testimony of E. B. McClanahan.) ord the other day Captain Lie's statement?

- A. I may have.
- Q. You did not consider that, though, of any significance at all, the fact that he had kept his vessel going until just the time when the other vessel came into sight? That was not a matter of any significance in this examination, in your mind?
 - A. I don't know what you are driving at.
- Q. You will find out what I am driving at when I get through.
- A. Well, come right at the point. For the life of me I can't see the materiality of this.
- Q. I will come at it in my own way, Mr. McClanahan, if you will permit me. You are almost as trying a witness as some of the others I have had. Now, do you recollect it, or not?
 - A. I have told you that I did not.
 - Q. But you did put it in the record the other day?
- A. I may have put it in the record. Why don't you turn to it and show it to me, and I will admit it if it is in the transcript. [836—713]
 - Q. I will read it:
 - "Q. When you blow two whistles your ship is stopped through the water? A. Yes, sir, that means the ship is done in the water.
 - Q. To stop your ship through the water you would have to stop and back your engine? A. If I was done I would.
 - Q. How long would she run after your engines were stopped?
 - A. About 5 minutes. I was going to blow

(Testimony of E. B. McClanahan.)

three whistles. I gave three to back her. She was stopped at the moment I gave three whistles."

You recollect putting that in, don't you?

A. I certainly do.

Q. You recollect Captain Lie giving his testimony at that time?

A. Well, I think he gave it. I don't remember that he gave it.

Q. It was just after that that the significant conversation between Bolles and Bulger occurred?

A. I don't know what you refer to as significant.

Q. Well, you brought it out the other day, you put it in the record. A. Well, read it.

"Q. When you stop your engines dead still you are virtually stopped?

A. We are not allowed to blow as soon as we stop our engines. We may be going 15 or 20 knots.

Inspector BOLLES.—When she is stopped through the water, when there is no way on her."
You recollect that, don't you? A. Yes.

Q. You recollect putting that to the witness as significant, on Saturday morning?

A. I don't know how it was significant. I remember putting it to him.

Q. Well, why did you put it to him? [837—714]

A. I would like to have you show me the materiality of your question before I answer it.

Q. I am perfectly willing to let the record stand as it is. As I understand it, it was on account of

(Testimony of E. B. McClanahan.) this offense to Captain Lie by Mr. Bulger that you would not put on any more witnesses.

- A. I did not call it an offense.
- Q. Well, whatever it was?
- A. It was his conduct toward Captain Lie, yes, as I remember it.
 - Q. What did that conduct consist of?
- A. Now, I will have to ask you again to show me the materiality of that question.
- Q. Because you interjected it into the record yesterday. You said that it was on account of that conduct that you would not put on any further witnesses. I want to interrogate you in regard to that. Surely you would not put anything into the record you thought was irrelevant.
- A. You cannot do it, Mr. Denman, until you show me the materiality of it. How does it have any bearing on this case?
- Q. I want to show that you were mistaken on Saturday.

 A. Mistaken as to his conduct?
- Q. As to your conduct, mistaken as to your statement of the reason why you did not put the engineer on at that time.
- A. I am willing for you to show that I was mistaken. That was the only reason I remember of now. I don't know of any other reason for not putting any more witnesses on.
- Q. You have said that before. Now, Mr. McClanahan, what was the offensiveness of Mr. Bulger toward Captain Lie that you refer to?
 - A. If you show me the materiality of that ques-

(Testimony of E. B. McClanahan.) tion I will answer it.

- Q. I want to prove that there was none. You answer the [838—715] question and then I will show that there was no offense.
- A. Well, suppose you do show that there was none, then what is the materiality?
- Q. Then I will show the real reason why you did not put the engineer on. Now, as to the question, what did this offensive conduct consist of?
- A. Well, if you are anxious to know, Mr. Denman, you were there, of course, and saw it just as well as I did.
 - Q. I saw it different, though.
 - A. Yes, and that is quite likely.
 - Q. Just answer my question; don't interrogate me.
- A. It was not so much a discourteous action on the part of Captain Bulger as would be shown from reading the examination of Captain Lie as it was his tone of voice, the inflection he gave to his words, the way he looked—all of it was extremely discourteous to a man who was there out of courtesy, not there through any compulsion. Now, I may have been oversensitive in looking at that matter in that way. Captain Lie himself felt it and spoke to me about it. He felt as though he were on trial.
- Q. You are not answering my question, Mr. Mc-Clanahan; don't inject anything into your answer that is not an answer to the question. I am asking you what you saw, I am not asking you what the Captain might think. You are a lawyer and you ought to know how to answer the question; you are not a

(Testimony of E. B. McClanahan.)

layman witness, you know what is an answer to the question.

- A. Well, I am very much surprised, Mr. Denman, to have you ask me this question. I am surprised at all these questions. They have no materiality at all to the case.
- Q. Well, you may think they are not material, but I want to [839—716] give you a chance. You could have answered the questions at once, Mr. McClanahan if you desired to. You don't think I can trap you in any way, do you, Mr. McClanahan?
- A. I don't know whether you can or not; I am going to try and avoid it, if possible.
- Q. And that was the reason why you did not put on any more witnesses, was it?
 - A. Do you want me to answer that again?
 - Q. Yes.
 - A. Yes, that was the reason as I remember it now.
- Q. Why did you put on the third officer after that? A. Why did I put him on?
 - Q. Yes.
- A. I don't know. I think he was called for, wasn't he? I don't know.
- Q. But you say that the reason why you did not allow any further witnesses to go on was because Captain Lie had been insulted. Immediately afterwards you put on the third officer.
 - A. I did not put him on.
 - Q. Well, he was called. A. Yes, he was called.
- Q. He was called the same as any other witness was called?
 - A. Now, I can explain that very easily.

Q. Well, do it.

A. And I can do it without your suggesting that I do it. As I remember it now, this conduct on the part of Captain Bulger, the offensiveness of it kept growing on me, and while it did not appear to me at the end of Captain Lie's examination, it did not appear to me then to be appropriate, perhaps, not to put on any more, but as I thought of it it grew on me, and I finally came to the conclusion that I should not put on any more. Then another reason that occurs to me now, it looked to me as though there was an effort being made—and I may be mistaken in this—to get all of the [840—717] evidence of the "Selja's" officers before there was any evidence put on by the "Beaver."

Q. Had not the "Beaver's" captain testified at that time?

A. Exactly, but nobody else from the "Beaver" as I remember it—nobody else from the "Beaver." Captain Lie was then called, and then the third officer, as I remember it, was called.

- Q. Only two, as I recollect. A. Only two.
- Q. That was the reason, was it?
- A. That was the reason for what?
- Q. For not putting on any further witnesses?
- A. Oh, I think I have answered the question.
- Q. There was not anything offensive in Mr. Bulger's demeanor toward the third officer, was there?
 - A. I don't think so; I don't remember.
- Q. So there was not any evidence of a continuing discourtesy to the witnesses?

- A. No, I don't remember that there was.
- Q. Now, the reason is coming around to being fear in your mind that there would be an advantage taken of your witnesses by having all yours come on first before the others; is that the reason?
 - A. Is what the reason?
- Q. First you gave your reason as being an insult to Captain Lie. A. I did not call it an insult.
- Q. The manner that was shown toward Captain Lie? A. Yes, sir.
- Q. Now, you give it as your reason, that although the second witness was not insulted or mistreated in any way, and no offense was shown to him, you concluded, after hearing the second witness treated properly, that you would put no more on because all the witnesses of the "Selja" were going on first and none of those of the "Beaver"—is that correct?
- A. That may have had something to do with it. [841—718]
- Q. Now, is there anything else that could have had anything to do with it? A. I don't know.
 - Q. Now, just think?
- A. I have told you as I remembered it that my reason for not allowing any of the officers other than Captain Lie to be examined was because of Mr. Bulger's discourteous conduct in his examination of Captain Lie. Now, if there were any other reasons why I did not, and you call my attention to them. I will be glad to admit them.
- Q. Well, I have gotten one of them, that you were afraid that some advantage would be taken of you

because your witnesses were coming on too fast for you. Why should you be afraid, Mr. McClanahan, that any disadvantage would accrue to you by having your witnesses examined first?

- A. I decline to answer the question on the ground that it is not material. If you can show it to be material I will gladly answer it.
- Q. Do you recollect the last question put to Mr. Bjorn, the third officer? I will read it to you:

"Inspector BULGER.—How long was it from the time your ship stopped her engine until the collision occurred?

A. It was stopped about 3:10; collision occurred 3:15 or 3:16."

Do you recollect that?

A. I recollect having read it in the testimony. I don't have any independent recollection of having heard it at the hearing.

- Q. You do recollect now that it did occur, do you not? A. No, I say I do not.
 - Q. You do not?

A. I recollect having read it in the transcript. I have no independent recollection of the man testifying to that. [842—719]

"Inspector BULGER.—We would like to have your chief engineer."

You recollect that the transcript shows that that follows immediately after this question, do you not?

- A. Yes.
- Q. And then you recollect, do you, that you said:

"I think we have given our statement sufficiently."

Do you recollect that?

- A. Yes, I recollect having read it in the transcript. I never put any significance to it, though, so I have not charged my memory with it.
- Q. Do you recollect the testimony of the engineer given one week later in your office on that subject?
 - A. No, I do not.
 - Q. Well, I will recall it to you:
 - "Q. And at 3:10 the engine had stopped? A. Yes.
 - Q. How long would it take her to stop her speed going at the rate she was going at 3:10? About a minute, isn't it? A. Oh, it would take perhaps two minutes.
 - Q. Not more than two minutes? A. Do you mean to stop herself?
 - Q. Yes. A. Oh, a minute to 2 or 3 minutes.
 - Q. About a minute, isn't it really, Chief? A. No. Well, it would take her two minutes, I should think.
 - Q. About two minutes? A. Yes.
 - Q. That is at the outside. A. 2 or 3 minutes.
 - Q. Not more than 3? A. No.
 - Q. You are sure of that? A. Yes."

Did that have anything to do with your failing to put the engineer on at that moment?

- A. At what moment?
- Q. When he was asked for, just after the inquiry as to how long it would take from the time the ship

stopped her engines until the collision occurred?

- A. Absolutely nothing whatsoever. [843—720]
- Q. You can see the significance of it, can you not?
- A. No, I do not.
- Q. You do not? A. No.
- Q. Suppose she stopped her engines at 3:10 and at 3:13 was dead in the water and had not blown two whistles. Does it not occur to you that there might have been a fault on the part of the captain?
- A. Yes, but in my opinion no such thing could have happened.
- Q. But the chief engineer did testify that that was the case, did he not?
- A. On your cross-examination he did, but I don't think his evidence is worth a pinch of snuff. I don't think the engineer of any ship knows anything about how long it will take a ship to stop after her engines have once stopped.
- Q. And he did testify to that within a week after the hearing, didn't he?
- A. On your cross-examination he did, and you put words into his mouth, yes. A poor foreigner, who didn't have very good command of English, and he was led up to the water and made to drink.
- Q. Did you know at that time that the chief engineer had that opinion? A. No, I did not.
- Q. Do you recollect testifying—you are sure of that, are you?

 A. No, I am not sure of it.
 - Q. Then why did you say, no, I did not?
 - A. Because that is my present recollection.
 - Q. He may have said it to you at that time?

- A. He may have said what?
- Q. That the ship might have been stopped in three minutes. A. He may have said it to me when?
 - Q. Before the time you refused to put him on.
- A. Well, I don't know that I had seen the chief and examined [844—721] him on the facts of the case. I don't think I had. I may have. This was think the day of that hearing.

on the 25th. I was not employed in the case until I

- Q. Oh, no, you were employed the day before Thanksgiving, were you not? Didn't you work Thanksgiving Day on the case?
 - A. I don't know. What day was Thanksgiving?
- Q. Thursday, the 24th. You were employed on the 23d, were you not?
- A. No, I don't think so. I am pretty sure we were not. I am pretty sure we were not employed on the 23d.
- Q. You had not examined all the trial before the inspectors?
- A. I don't know, Mr. Denman, whether I had, or not. I am not sure about that. I know that we were called to the office of Henry Lund & Company, I think on the morning of the 23d, and there were some telegraphic communications between Lund & Company and New York, with reference to our employment, and I don't think it was settled until the next day. Now it comes back to me, I think it was the 24th that we were finally employed. I know they tried to get Mr. Page, but Page had already been employed by the Pacific Mail. I think it was on the

San Francisco & Portland Steamship Co. 997 (Testimony of E. B. McClanahan.)

afternoon of the 24th that we were finally employed.

- Q. Had you examined any witnesses before the afternoon of the 24th?
- A. Absolutely not, before we were employed; we had nothing to do with the case.
 - Q. Before the afternoon of the 24th?
- A. If that was the time we were employed, and I think it was. I am sure we were not employed on the 23d.
- Q. Let me ask you: do you recollect the following after the question as to how long it was between the time of the stopping of the engines and the collision do you recollect Mr. Bulger saying he would like to have your chief engineer and you saying, [845—722] "I think we have given our statement sufficiently"—do you remember that? A. Yes.
 - Q. That is correct, is it? A. Yes.
- Q. And then the question was, "Have you any objection to putting anybody else on the stand," and you said "yes, because it is not necessary to put them on the stand in this hearing." And then Inspector Bulger said: "I would like to know if his engine was stopped, according to the log." That shows, of course, what he was after. And then you said: "I prefer not to have any of the witnesses put on for the Norwegian ship." And then Inspector Bulger said: "We have got part of it." To which you replied: "You got all of it." "Well, I have said my say, I don't propose to put on any more witnesses. They can give you no more light than you have. I have examined them and I know."

At that time had you examined the chief engineer and did you know what he would testify to as regards the time it would take to stop the ship?

- A. I don't think so.
- Q. Well, they were trying to put the chief on at that time, were they not?
 - A. The record speaks for itself.
- Q. Yes, that is correct. The chief is the one they were trying to put on at that time, were they not?
- A. I say the record speaks for itself. I don't know anything more than what the record shows.
- Q. And the chief engineer did give the testimony I have pointed out to you, about a week afterwards?
- A. Yes. I don't know whether it was a week afterwards, or not, but it was sometime afterwards.
- Q. Did you inform the United States Inspectors of the fact that you were mistaken when you told them as you did here [846—723] that you examined them and knew what they would testify. Did you tell them you were mistaken with regard to the engineer's testimony, and what it would have been? A. Why no.
- Q. I suppose you felt that Mr. Bulger's rudeness absolved you from that?
- A. I decline to answer that question; it is impertinent, irrelevant, immaterial and incompetent.
 - Q. I don't mean to be impertinent.
- A. Well, you are certainly impertinent when you ask that question.
- Q. Let me ask you—you would not consider this an impertinent question: were you at that time ap-

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pointed attorney for the Norwegian Consulate?

- A. In what matter?
- Q. Were you acting as the attorney for the Norwegian Consulate? A. In what matter?
 - Q. In any matter.
- A. I think we were advising Mr. Bjornstead, who is the Secretary for Mr. Lund.
- Q. You were the attorney for the Consulate at that time, were you not?
- A. I do not care to say more than I have, that we were advising with him.
 - Q. Was that an appointive position? A. What?
 - Q. Your position that you occupied as adviser?
 - A. Was it an appointive position?
 - Q. Yes.
 - A. I think it was an accepted position.
 - Q. Was there anything political in it?
 - A. Not that I know of.
- Q. It would not color your testimony in any way, would it, the fact that you held that position?
- A. Well, I decline to submit any more, Mr. Denman, to this line of examination; I don't know what you are driving at.
- Q. Let me ask you a fair question: what did you mean when [847—724] you asked Mr. Bulger on Saturday whether or not he occupied an appointive position in the Federal Government?
- A. If you show me the materiality of that question you put to me I will answer it; otherwise I will not.
- Q. You went into it yourself, and, of course, it must be material.

A. You did not object to it. If you show me the materiality, I will answer it; otherwise, I will not. I am getting very tired of this whole examination. There is absolutely nothing in it of any materiality to the issues of this case.

Q. So was Mr. Bulger tired of it.

A. Are you now representing Mr. Bulger in this cross-examination of me?

Q. No.

A. Who are you representing? Are you trying to clear Mr. Bulger?

Q. Oh, no.

A. What is the object of this examination?

Q. I am trying to find out why you asked him that question, for the purpose of clearing up the record in that regard. You tendered the issue. You asked him concerning his federal appointment. You said he had a federal appointment, of an appointive nature, and you suggested that it would materially affect his testimony. I want to ask you whether or not, in your opinion, such a position held by you would affect your's?

A. Then you have withdrawn your other question, have you not? In other words, you have failed to show the materiality of your other question which I declined to answer unless you did make it appear material to me. You have withdrawn that, have you?

Q. You understand my question, do you not?

A. You answer my question, have you withdrawn the other question? [848—725]

Q. Which question are you referring to now?

A. The record will show, the one I declined to answer. This is the most farcical examination I ever heard of.

Q. I think so, too.

A. If you will tell me how the material issues of this case are being enlightened one way or the other by this examination, I shall be very much obliged to you.

Q. Now, let me ask you this: Do you recollect, about a week after the collision, my requesting you for a copy of the statement made by the officers of the "Selja" to the Norwegian Consul?

A. I decline to answer that question.

Q. The purpose of this is to show that counsel on the other side—what is the ground upon which you decline?

A. It is absolutely immaterial; it has no bearing upon the issues in that case.

Q. Let me put another question to you: Do you recollect—

A. (Intg.) I don't think you can put a material question to me, Mr. Denman.

Q. Oh, certainly; none that you will treat as material if you do not wish to answer them.

A. It is quite apparent that you do not know how to put a material question to me.

Q. Is it apparent to you that I cannot put one to you? Now, what is your best recollection in regard to my demand for a copy of that testimony?

A. I decline to answer upon the ground that it is not material.

- Q. Do you recollect that that testimony had in it a statement to the effect—by the Captain here—to the effect that when the collision occurred the ship struck at right angles? [849—726]
- A. I decline to answer upon the ground that it is immaterial.
- Q. Have you the original transcript of the notes of the statement made by Captain Lie and the other officers before the Norwegian Consul concerning the facts attending the sinking of the "Selja"?
- A. Have I the original notes of their statements to me?
- Q. No, of the transcript of the testimony before Mr. Brown, acting for the Norwegian Consul?
- A. I don't quite follow that, Mr. Denman—have I the notes, the stenographic notes of the evidence given before Mr. Brown?
 - A. Have I them? Q. Yes.
 - Q. Yes.
- A. Not unless somebody has put them in my office without my knowing it.
- Q. Do you recollect going to Mr. Brown, or the stenographer himself, and asking for those notes?
- A. I don't think I ever went to Mr. Brown with any such request.
 - Q. Did you go to anybody else with that request?
 - A. I decline to answer.
 - Q. Why do you decline to answer?
 - A. Because I don't think it is material in this case.
- Q. If it is not material, it can't affect your case, can it?

- A. We are wasting a lot of time here, and I am submitting to your examination on a matter that I consider absolutely immaterial to this case.
 - Q. You decline to answer, do you? A. Yes.
- Q. Let me ask you: Do you know you insinuated on Saturday that the fact that Mr. Bulger held a federal office in some way reflected on his memory of his testimony. Of course, you would not insinuate into the record a thing which you would not [850—727] explain; will you explain what you meant by that?
- A. I decline on the ground that it is immaterial and I also say that you are making wide use of my cross-examination when you say it insinuates one thing or another; the record speaks for itself.
- Q. Well, you don't mean to say that you deny your manner was not insinuating at that time?
- A. Why, certainly, I do. I don't know that my manner with regard to that question was any different from what it was in regard to any other question.
- Q. So you will let the record stand with whatever insinuation may be inferred from the question and without explaining what you meant?
 - A. Certainly.
- Q. As I recollect it, you stated on Saturday that you were certain that the log of the steamer "Selja" was read at the taking of the testimony before the United States Inspectors?
- A. That is my recollection, yes; read by either Mr. Bulger or Mr. Bolles. The record shows Mr. Bulger. I should have said that Bulger read it, but he said he

(Testimony of E. B. McClanahan.) did not. It was read by one of the two.

Q. Do you recollect this statement in it:

"At 3:05 P. M. ordered slow speed, as we heard the whistle nearing, and at 3:10 stopped the engines, the vessel then being nearly at a standstill."

A. I remember that that was read from the translation of the log, yes.

- Q. Do you recollect that Inspector Bulger put this question:
 - "Q. When you stop your engines dead still you are virtually stopped?"

A. No, I do not. I remember having read that in the transcript, but I have not any independent recollection of that question. [851—728]

Q. The one is practically a following up of the suggestion of the other, is it not?

A. I don't know.

Q. That is to say, Captain Lie said the vessel was almost at a standstill when the engines were stopped, and Mr. Bulger said, "When you stop your engines dead still you are virtually stopped?" Those two statements are practically identical, are they not?

A. I don't know. I suppose you can argue that they are.

Mr. DENMAN.—That is all.

(An adjournment was thereupon taken until tomorrow, Tuesday, July 25th, 1911, at 10 A. M.) [852—729]

Tuesday, July 25th, 1911.

Mr. McCLANAHAN.—I think, in my examina-

tion yesterday, that there was a question propounded as to whether I had taken a statement of the chief engineer prior to the hearing before the inspectors. Mr. Derby called my attention to a letter which he wrote to our principals, I think on the 25th of November, and in that letter his statement appears that we took the statement of the officers of the "Selja" yesterday. That would be the 24th. I just want that to appear in the record.

Mr. DENMAN.—It also appeared, Mr. McClanahan, that you testified, or that you stated to the inspectors on that day, that you had examined them and knew what they would say.

Mr. McCLANAHAN.—Yes, that appears in my evidence, and that is the reason I am making this statement now. It may be that there was uncertainty as to my statement with reference to having examined the chief engineer before the hearing. If there was, I want to have the record show that this letter was written on the 25th, I think, in which it is stated that the statement of the officers of the "Selja" was taken in my office. That, is all.

[Testimony of Lionel Heynemann, for Claimant (Recalled—Cross-examination).]

LIONEL HEYNEMANN, recalled for further cross-examination:

Mr. DENMAN.—Q. Mr. Heynemann, you recollect testifying that it would take a certain length of time for the "Selja" to stop in the water, if her engines stopped, when she was going at a certain speed;

(Testimony of Lionel Heynemann.) you recollect that? A. Yes.

- Q. Now, will you just take a sheet of paper and compute how long it would take the "Beaver" to stop, presuming you have the [853—730] same data here and the same circumstances?
 - A. I could not do it.
 - Q. You were able to do it for the "Selja."
- A. No, I did not do it on the spur of the moment; it was quite a long process.
 - Q. Just tell us what the process is.
- A. Well, I doubt whether it would be of any use to you if I were to explain the process.
- Q. Well, just explain it, so that if there were an expert here he could use it, or if the Court happened to be expert enough to understand it, the Court could use it.
- A. I will say that I have a diagram here that might possibly throw some light on the subject. I have a diagram here before me which represents the conditions of distance run for the Norwegian steamer "Selja" when running at 40 revolutions, and after 5 minutes reducing her speed from 40 to 20 revolutions. This diagram represents the distances run under those conditions.
 - Q. Just let me look over it, please.
 - A. Yes (handing).
- Q. Suppose a vessel is going at the rate of 6 knots through the water, and her propeller is stopped, the propeller, of course, extends into the water on both sides of the stern of the vessel and close to it, does it not? A. Yes.

San Francisco & Portland Steamship Co. 1007 (Testimony of Lionel Heynemann.)

- Q. Will it check her as much if it is going at a 3-knot pace as if it were not going at all?
- A. I would say it would not check her as much under certain conditions.
- Q. I am presuming still water and that the vessel is going ahead. [854—731]
- A. In former testimony I think I have explained that under certain conditions, with a very easy running engine, the advance of the vessel would revolve the propeller; that is to say, a propeller would be moving by the mere advance of the vessel in the water; that would then cause the engine to revolve and that might under certain conditions cause less resistance than the drag owing to the vessel going one speed and the propeller going another.
- Q. Would those easy-running conditions be likely to exist on the ordinary merchant ship?
 - A. No, I hardly think so.
- Q. Have you, since I last talked with you, computed the amount that would be added to the distance run by the vessel by having her propeller turning at 3 knots, between 3:05 and 3:10? I am speaking now of the "Selja." A. I have.
 - Q. About how much is that, in round figures?
- A. The additional distance run would be approximately 500 feet.
- Q. I am now asking you in regard to the "Beaver." Presuming she is running at a 3-knot speed, and her engines are stopped, how long would it be before the "Beaver" would be stopped in the water?
 - A. I could not tell you.

Q. I know you have said that before. Will you kindly check off or put into the record the steps that you would pursue in determining how long it would take the "Beaver" to stop under those conditions?

A. I do not know that I could tell you all those steps within a reasonable time.

Q. Well, there is a way of accomplishing that result, I presume. You could go through a mental process. You do go through a mental process, don't you? I am not talking of figuring it. You apply a certain formula, don't you?

A. I will explain it in this way, that as a general proposition [855-732] and the idea that these diagrams are founded on, when you have two different rates of speed and you draw these two different rates of speed and separate them by a distance equivalent to the time, you create a certain figure; the area of this figure is the distance run. Now, if you want me to bring that down to very plain figures, I can state it in this way, that supposing a wagon is rolling down the hill and it starts in with a speed say of 2 feet, and has accumulated a speed after a little while of 4 feet; and supposing that that acceleration has been a gradual one, then her average speed would be 3 feet. Now, supposing that it takes her 5 seconds to accomplish this travel or this acceleration—to reach this acceleration—then the distance travelled would be 5 times 3, which is 15 feet. Now, if you take a figure and take a base line of 5 and take an ordinate on the one side of 2 feet and on the other side of 4 feet and you connect the two lines, the two

(Testimony of Lionel Heynemann.) points, at the end of the ordinates, you produce a figure that is called a trapezium. Now, the area of that trapezium is equal to the distance run.

Q. How accurate do you regard your computations when you begin to get down to a very slow speed at the end of the computation? Practically how accurate are they when you get down to 2 knots and below? I know the theoretical result keeps spinning out to infinity, but I mean as a practical man, how accurate do you regard your illustrations when you get down to 2 knots?

A. It will not spin out to infinity, but it does spin out to very narrow limits.

Q. Absurd limits for practical purposes, is it not?

A. I can answer your question by stating, for instance, that in this diagram of the "Selja," which is before the Court, at [856—733] 3 hours and 20 minutes the distance run is 6035 feet—under certain conditions; at 3 hours, 21 minutes and 40 seconds, the distance run is 6043 feet. In other words, in one minute and 40 seconds that vessel travelled 7 feet. It may have travelled 8 feet, it may have travelled 10 feet.

Q. In a very rough sea, it might not travel at all?

A. It might not travel at all. These figures do not take in the condition of currents and winds and waves.

Q. I know, they are just theortical. Now, let me put the question to you again, because, frankly, I have consulted with your confreres and I have got an impression. Is it not true that these computa-

(Testimony of Lionel Heynemann.) tions on the speed of vessels, when you get below 3 knots, are regarded as of dubious value?

- A. No, I would not say that.
- Q. When you get below 2 knots are they not regarded as of dubious value?
 - A. No, I would not say that.
- Q. Are not the other factors that enter in—sea and wind and other stresses in the shape of the molding of the vessel, and that sort of thing,—are not those so variant that when you get below 3 knots you can no longer place any practical reliance on these calculations?
- A. In answer to that I will say that there are no calculations that can be made by the human mind under any conditions that are of absolute value.
- Q. I am not talking of absolute value, I am talking of practical value?
- A. All our theories depend on certain conditions which may not be absolutely correct. But if we want to divest ourselves from the possibility of giving results owing to the fact of different conditions we will not be able to arrive at any results at all. [857—734]
- Q. I quite understand that, but there is a vast field in which mathematics can be used and figured down to very fine degrees, in various mechanical and engineering matters, and yet it is universally recognized that when it comes to figuring for practical purposes, that those mathematics encounter such variance in actual conditions that they are practically of no value? You have to abandon mathematics in a very wide field of calculation, do

you not, and simply take your experiments?

A. No, I would not like to make that statement, Mr. Denman. The reason I do not want to make that statement is that I have too much respect for the science of mathematics.

Q. I am not making fun of the science.

A. But given certain conditions, and excluding other conditions, mathematics and the physical sciences are the only means by which we have for arriving at any results at all. You may say, for instance, that a train under certain conditions will go 30 miles an hour. You can figure out those conditions. But there may be a whole lot of other conditions that might prevent that train from making 30 miles an hour, but if we cannot at first make these figures and base our estimates on them, we are altogether at sea.

Q. Oh, I quite understand that. But when you get down—

A. (Intg.) It is very true, I say, that toward the last end it is possible that this slow drift of 8 feet in nearly two minutes—it might be 9 feet or it might be 10 feet, but I will say this, if you take the ordinary observer—and by the ordinary observer I will say the Chief Engineer of a boat, it would be perfectly impossible for that chief engineer by looking over the side, to determine whether that vessel was moving or not. The chief engineer may be under an entirely wrong impression unless he had gone through— [858—735]

Q. (Intg.) Had gone through these mathematics?

- A. Gone through calculations of this kind. And I will say that most engineers are unable to go through theories of this kind.
- Q. Now, do you suppose that the rules of whistles at sea, that their application is to be based on making calculations of that kind? A. No, sir.
- Q. It is a practical determination of when the vessel is dead in the water that must govern?
 - A. Yes.
- Q. Now, let me ask you: suppose your vessel is going at this very slow speed, what would be the effect on her of rough water as compared with smooth water?
- A. Well, the rough water might aid her or might retard her.
 - Q. How could it retard her?
 - A. It could retard her by a head wind.
- Q. I am talking about the water; let us cut out the element of air entirely. A. By currents.
- Q. Let us presume the water has no currents. As far as the retarding effect of her speed, the current has nothing to do with that, she moves in the current? A. The current might be against her.
- Q. Well, suppose the current were against her, she would move in the current; her rate with reference to the current would be constant, would it not? The fact that a ship is floating in a current, has nothing to do with its stopping, of course? A. Yes, it has.
- Q. Now, that is interesting. How would it? Presume now that the vessel is in the Gulf Stream, and we don't know where the bottom is, we don't

care anything about her stopping with reference to the bottom; but she is floating along; will she stop any sooner in the water or will it take any longer to stop in [859—736] the water under the conditions the "Selja" was in, or presumed to be in, at 3:05 or 3:10, because of the current?

A. I am under the impression that the laws of relative velocity would come in there and it would practically make no difference. I am under that impression. But a vessel travelling sets up a certain current and that water is torn along with the vessel advancing; now, there may be a difference in this, that if the vessel is travelling in otherwise quiet water the effect of that water that is torn along creating as it were its own current is not counterbalanced as it would be under other conditions. Do you understand what I mean?

Q. I understand it. You have made it perfectly clear.

A. But I am under the impression that practically it would make no difference if you put it in this way, that in the Gulf Stream a current of immense width—I don't believe that relatively the figures would be any different.

Q. Presuming, now, that if we are in currents at all we are in the Gulf Stream, in the center of it, would it or would it not make any difference in the time in which the vessel would stop if the water were very rough, if the sea was very rough, as compared with being smooth?

A. I would have to know whether you mean by

"stopping" a relative stopping or a positive stopping. What I mean by a relative stopping is a stopping with regard to the current that she is in, or a stopping with regard to some point on the land.

- Q. With regard to the water, stopping in the water?
- A. I believe it would depend on the size of the vessel.
 - Q. It depends upon the size of the vessel?
 - A. Yes.
- Q. If she were a large Atlantic liner, covering 2 or 3 waves, it would be one thing, would it not?
 - A. Yes. [860—737]
- Q. If she were a smaller vessel, it would be different? A. Yes.
- Q. How large are those Atlantic liners—how long?
- A. The big ones now are 700 feet long. The new ones are over 800 feet long. The "Olympic" is nearly 840 feet, I think it is.
- Q. The greater percentage of that draught is under water even where there is a fairly rough sea, is it not?
- A. The entire draught is under water. By "draught" you mean the part of the vessel that is under water?
- Q. Then I am using the term improperly. Of course, the deeper the vessel the less she is exposed to variations due to wave action?
 - A. I should say that that is correct.
 - Q. That is, the greater portion of her would be

San Francisco & Portland Steamship Co. 1015 (Testimony of Lionel Heynemann.)

in steady or comparatively steady water under the waves—that is correct, is it not? A. Yes.

Q. And as you go down in the size of vessels the relative effect of the wave action of the water rapidly increases, does it not? For instance, take a vessel that covered two waves, two waves will produce a certain effect on her; cut it down to one wave and it would be very much more than twice as much, would it not, in all likelihood?

A. That is putting it in a way that is difficult to answer.

Q. That is about the way a seaman would think of it, is it not?

A. There are certain phenomena that would take place on a smaller vessel that would not take place on a big vessel; but to say that one would have double the effect of another by comparing a one-wave vessel as compared to a 2-wave vessel, I am not prepared to say that, whether the effect would be double or half. It puts it in a way that makes it impossible for me to answer. [861—738]

Q. The tendency would be to have the effect increased very largely?

A. I don't know what particular effect you are speaking of.

Q. Well, the effect upon the speed of the vessel?

A. I don't believe that when a vessel reaches a certain size the waves have much effect.

Q. Well, presuming that then. Presuming that the vessel has reached the size where she crosses so many waves and is so deep in the water, she is (Testimony of Lionel Heynemann.) beyond wave action?

- A. No vessel is beneath wave action.
- Q. How much of the vessel is beneath wave action—I mean to say that the depth of the vessel is so great, the draught in smooth water is so great, that as the movement of the waves goes on it does not get very far down on the side of the vessel; the amount of increased surface exposed to friction by the wave motion is lessened necessarily as the depth of the vessel increases—that is a fact, is it not—a proportionate amount?

A. It is also difficult for me to answer a question put in that way because no vessel draws so much water as to be below the wave disturbance. They are all more or less under the influence of the waves. I suppose you gentlemen will understand that there is no forward or backward motion to a wave. It is a sort of vibration. It is a vibration. The large vessels are not affected to any great extent by the action of the waves.

- Q. Now, let me ask you this: I am quite well aware that that is your theory. While there may be no forward or backward motion of the water, is there any power transmitted through the water?
 - Λ . There certainly is.
- Q. And does not that power beat upon the shore and upon the cliffs when it comes to the end of its course? [862—739]

A. The wave that beats upon the shore and upon the cliffs is an entirely different wave from the sea wave. Q. I mean the power that creates that.

A. But that is a different power from the one you are speaking of.

- Q. The power that creates the wave that beats upon the shore is the wave out at sea, is it not, transmitted through the water?
 - A. No, sir, it is not.
- Q. Have you ever seen waves rolling in from sea, where there was deep water under a heavy cliff?
 - A. Yes.
- Q. And how as they struck the cliff the cliff would resound? A. Yes.
 - Q. And how it would jar? A. Yes.
 - Q. And the water would splash high in the air?
 - A. Yes.
- Q. Where is that power created? I am talking about the power; I am not talking about the fulcrum or leverage on which the power works?
- A. One power is simply represented by the weight of the water.
- Q. What moves the weight? Remember, I am talking about the power.
- A. One power I say is represented by the weight of the water; another power at sea is represented by the buoyancy of the water. Those are two entirely different things.
- Q. As I take it, those are not powers, those are things moving?

 A. One is the power.
- Q. What is the power? What is the thing that starts the wave moving? A. The wind.
 - Q. Suppose there is no wind at all blowing at

the time the wave hits the cliff, what has brought that power to the wave and sent the water in the air?

- A. The vibration of the water. [863—740] I can illustrate that: suppose you have a string in your hand and I hold the other end in my hand, and we stretch that string taut and I tap that string on my end you will find a translation of waves going through that string. There has been no transmission of matter, there is only a transmission of vibration you may call it.
- Q. You can call it what you please, but it is a transmission of the thing produced by your hand at the other end, is it not? A. Yes.
 - Q. And that is power? A. Yes.
 - Q. And I will get a jar on this end? A. Yes.
- Q. Suppose the wind is blowing a thousand miles out at sea, supposing it produced a tremendous sea, supposing the wind never reaches the cliff but the wave drives against the cliff, jars it, possibly shatters it, and sends spray high in the air, the power that created that was the wind out at sea, wasn't it?
 - A. Yes.
- Q. And that power has been transmitted through the water? A. Yes.
 - Q. Through the wave motion? A. Yes.
- Q. Will not that power when it strikes the ship broadside to it be translated to the ship as it would be to the cliff? A. Yes, sir.
- Q. And wouldn't it be on the bow of the vessel in the same way as it would on the side, to a certain

extent? A. When I answer in the affirmative I—

- Q. (Intg.) Well, answer first and explain afterwards, if you will? A. What is the last question?
- Q. Would it not have a deterrent effect on the bow of the ship [864—741] just as it had on the side—relatively, not as great perhaps but wouldn't it have a deterrent effect?

A. It will have a deterrent effect in a certain way. If a wave that does not break climbs up the side of a vessel there is no such action as you speak of. You will find no spray flying up in the air. You will find that the vessel simply is in a body that is under a certain vibration. If the wave breaks, as it does against a cliff, and as it very often does at sea, then it does have that effect on the side of the vessel that you speak of. But a very big wave, say a 20-foot wave, can come along head-on and the vessel plunge into it and cause a very little deterrent effect except that increase owing to an increased frictional resistance, owing to the fact that the water climbs higher up on the hull. But, on the other hand, that is equalized by being lower down further aft. So the deterrent effect—

Q. (Intg.) Your idea is that it will move a vessel, or the power will be translated into the side of a vessel if it strikes the side but it won't be translated at all into a vessel if it strikes the bow; is that it; is that your idea?

A. No, that is not my idea. I mentioned that if the wave breaks—

Q. (Intg.) Have you ever seen—

Mr. McCLANAHAN.—Let the witness answer the question without interruption, Mr. Denman.

A. (Continuing.) If the wave breaks against the side of the vessel, then there is that effect that you speak of, and if the wave does not break against the side of the vessel there is, I should say, very little deterrent effect. [865—742]

Mr. DENMAN.—Q. Have you ever seen a vessel pounding through a heavy swell? A. Yes.

- Q. Waves do break on the bow, don't they?
- A. Oh, yes, they do.
- Q. And that expresses power translated from the wave into the vessel, does it not?
- A. Yes, but there again, Mr. Denman, I do not want to, I would like to make myself clear on this point, I have very often seen waves breaking against the side of an advancing vessel when there were no waves; that is to say, in a smooth sea, with a rapidly going vessel, you will see that same advance. It is not the question of the wave then, so much as it is the question of the advance of the vessel. You will see that in a smooth sea. It is a natural resistance which a quiescent body like the water interposes to a rapidly moving body. It is not so much the question of the waves.
- Q. Have you ever seen waves break around the bow of a vessel at anchor?
- A. Yes. There again it is the same proposition, the current is moving. You see that when a vessel swings at anchor in the tide, a very strong tide—you see that there.

- Q. I am not talking about tide now.
- A. The vessel is very much the same only it is a difference relatively; the vessel is quiet and the current is going; the other way the vessel is moving and the water is quiet.
- Q. Have you ever seen when there is an out tide—I know you have seen this at the Fulton Iron Works—when there is an out tide and the stern of the vessel is exposed to a westerly swell? That is a very frequent occurrence in that neighborhood, is it not? A. Yes.
- Q. Have you ever seen the waves break on the stern of the [866—743] vessel in a westerly swell?
- A. I don't remember seeing them break on the stern of the vessel. I do remember seeing them break on the seawall.
- Q. Have you ever seen them snap up and break under the stern—on any vessel that was in that neighborhood?
- A. The reason I say I don't remember it is that our wharf was enclosed by the seawall.
 - Q. But you have seen vessels anchored outside?
 - A. We did not anchor any outside.
- Q. But you have seen others anchored out there a great many times, have you not?
- A. Oh, yes, but in our own basin there was no such action.
- Q. Now, let me ask you, are you still of the opinion that a vessel going into a heavy swell at say a 15-knot pace would not be deterred in the slightest

(Testimony of Lionel Heynemann.) by the fact that she was going into the swell under what she would make in smooth water?

A. No, I did not say that she would not be deterred in the slightest.

Q. Then there is a possibility of translating some of that great power of the waves into a vessel with a retarding effect?

A. I don't know that I can answer that question in that form.

Q. Please repeat the question, Mr. Reporter.

(Question read by the Reporter.)

A. I should say there is some, yes.

Q. Now, if you admit the presence of the mechanical principle, the physical principle, would you care to set up your theoretical knowledge against the statement of the man who had taken the vessel through these conditions time and again, as to how much degree of retardation there might be?

A. I don't think that any practical man could answer that question [867—744] about the degree of retardation.

Q. It would have to be a matter of experiment and observation, would it not?

A. It would have to be a matter of observation and experiments that would be very difficult to make.

Q. Well, presuming he is going at a pace that that would produce 15 knots in smooth water, and if there is any current at all it is a current with him, and he discovers that he is covering over land in the neighborhood of 12 knots in an hour—

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- A. (Intg.) Over land—you mean by land measurements?
 - Q. No, I mean over the bottom of the sea.
 - A. From shore distances?
- Q. From shore, or over the bottom; is there any reason why he should not be able to determine that the swell had cut him down that amount?
- Mr. McCLANAHAN.—I object to the question upon the ground that there is no evidence in the case —I suppose the question is directed toward the movement of the "Beaver" is it?
- Mr. DENMAN.—No. I am trying to find out if there is any theoretical element that the captain cannot get hold of that the scientific man can when the vessel has covered in a rough sea a distance of 12 knots in an hour when, as a matter of fact, she is going at a speed that in smooth water would give her 15 knots.
 - A. All that I can say is that I would be very careful about taking the statement of the one who stated he made that observation. I would be very careful about taking that statement.
 - Q. Would you question the likelihood of a swell having sufficient power to cut down the vessel that amount in that length of time?
 - A. I would very much question it.
 - Q. Suppose that that came from an officer of the United [868—745] States Navy who had been observing that for very many years, would you still question it?
 - A. I very often question statements made by offi-

(Testimony of Lionel Heynemann.) cers of the United States Navy although I believe as a rule they are fairly accurate.

- Q. You did make some computations regarding the turning of a vessel under a reversed propeller, based on observations made by a naval officer, did you not? A. Yes.
- Q. Those were made on naval vessels, were they not?

 A. No, that was a merchant vessel.
- Q. Oh, yes, there was one vessel that was made the basis of that computation? A. Yes.
- Q. Practically though your entire result was based on that one merchant vessel, was it not?
- A. I don't know what you mean; by the entire result of what?
- Q. Your testimony regarding the amount that a vessel would swing under a reversed propeller? You remember Mr. Dickie testified to that?
- A. Yes, I remember that we based our observations on those experiments. I also remember that you asked me about the influence of a right-hand propeller and a left-hand propeller on the tendency of a vessel and I stated at the time that I did not know about it; you mean that it was in connection with that, do you not?
 - Q. Yes.
- A. I would like to state that the reason I don't like to make any statements about matters of that kind is on account of the difficulty of making correct observations.
- Q. That was not the question I asked you, I asked you if it was not generally known among the pro-

fession that a right-hand propeller would swing to starboard and you said you didn't know?

A. I said I didn't know it, but I did know at [869—746] the time that certain vessels carried a port helm to overcome certain tendencies of the vessel. Now, whether that is exactly attributable to the propeller or to other conditions is hard to say.

Q. Did you not say that the helm would have very little influence when the vessel was going ahead under a reversed propeller? A. Yes, we did say that.

Q. Now, you say that there are vessels that do carry a port helm to overcome it, is that correct?

A. I say there are vessels that carry a port helm to overcome the tendency of the vessel to go either one way or another. And other vessels again have to carry a starboard helm on account of the same thing.

Q. And the same propellers, all right-hand propellers?

A. Yes, right-hand propellers. The reason of it is this: You cannot make any two vessels, you cannot build a vessel that is exactly symmetrical to a center line. There may be differences on one side or differences on the other. To say that a vessel has a certain tendency on account of a right-hand propeller, or on account of a left-hand propeller, is a difficult statement to make, and for that reason I did not want to make it at the time.

Q. You did not understand that I was simply putting the question to you other things being equal—you did not understand I meant that? You thought

I had hidden some mysterious curve or wave in the bottom of the vessel. Let me put the question to you now: presuming other things to be equal what will be the tendency of a right-hand propeller with regard to turning the bow of the vessel as she is going ahead, the propeller being reversed?

- A. When you say "other things being [870—747] equal" what do you mean?
- Q. What will be the tendency of that force, presuming the keel-line and other lines of the vessel are properly modeled?
- A. In other words, your question is a purely theoretical one in which a vessel absolutely perfectly formed and without more resistance on one side than on another has a right-hand propeller, and whether that propeller would not have a tendency to deviate her from her straightforward course.
 - Q. Yes, upon being reversed.
- A. Oh, when being reversed, or do you mean going forward?
- Q. The vessel is going forward but her propeller is being reversed. That is the only question I ever asked you about it?
- A. Yes, I should say there is always a tendency there.
- Q. And that is well known both among shipping and engineering men? A. Yes.
 - Q. That is common knowledge? A. Yes.
- Q. Didn't you know that that is what I asked you about in the beginning?
 - A. No, I did not understand it that way.

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Q. You spoke of deviations from the normal on the bottom of the vessel? A. Yes.

Q. They do not produce any serious effect on the vessel, do they? A. No serious effect.

Q. I mean they do not produce any effect with regard to the line the vessel will describe through the water?

A. They do. I don't know whether you have quite understood me, Mr. Denman; I make this statement, that a great many vessels going ahead—without reversing the propeller at all—have to overcome slight resistances of the vessel which would have a tendency to send her either to port or to starboard by carrying an opposite helm; certain vessels have to figure—in fact, [871—748] I will make this statement, that hardly any vessel that is built that carries a straight helm and a straight rudder will continue in calm water in an absolutely straight course.

Q. Does that vary much in vessels? There is not so great a difference in vessels in that regard, is there?

A. No. There are little differences which will cause the vessel to leave the straight line. That point may be illustrated by saying that supposing you attempt to build two sister ships on exactly the same lines—the same weights, the same everything—one vessel will show slight differences from the other, in speed and in every other respect.

Q. That is what you meant when you said it might throw her to port or might throw her to starboard?

A. Yes, sir.

- Q. So that if you attempt to build two sister ships and pursue the ordinary commercial methods of construction you might have one of those vessels, being reversed full speed astern when she is making 10 knots through the water, going to starboard and the other one going to port? A. No.
- Q. You did say, did you not, that you could not answer the question—presuming a right-hand wheel in both cases—as to whether or not the right-hand wheel would have a tendency to throw her to starboard because of the differences in the water lines of the vessel? A. Yes.
- Q. Now I ask you whether those differences could be so great on two vessels—sister ships built at the same time and under ordinary commercial conditions—that would throw one to starboard and one to port?
 - A. Not under other conditions, no.
- Q. Don't they try to get all vessels with the proper water lines? A. Certainly they do.
- Q. Couldn't they have slipped up on one of the sister ships [872—749] and not on the other?
 - A. Not to that extent.
 - Q. Not to that extent? A. No.
- Q. Then they both would be certain to throw to starboard or throw to port?
- A. Throw one way or the other—after a certain length of time. As we said, and as those experiments show—those experiments show that the rudder is of very little directive force in a vessel going astern until a certain distance has been passed over.
 - Q. Yes, the rudder is, but the—

- A. (Intg.) The rudder and the helm the same.
- Q. You say of less directive force when there is a strong swirl produced by the propeller right where the rudder is working? A. Yes.
- Q. But that is accounted for by the fact that the propeller is producing forces there, is it not?
 - A. Yes.
- Q. And though her stress of these propeller forces are things that are not at all well known by engineers—that is, you stated on your direct examination that when you came to determining questions of propeller forces you hesitated to make any positive statement, did you not? A. Yes.
- Q. And that is particularly true of a propeller going astern, is it not, under various speeds of the vessel? A. On a backing propeller, yes.
- Q. The reason the rudder does not exercise its ordinary function is because there are other forces at work? A. Yes.
- Q. And you are not able to state here as an expert what those forces are with reference to different vessels? In the first place, you are not able to state the tendency of different vessels, whether to port or to starboard—you recollect giving that testimony, don't you? A. Yes. [873—750]

Mr. McCLANAHAN.—Mr. Denman, can't you put one question at a time? You have been doubling up your questions right along. Right there you coupled another question with the first one.

Mr. DENMAN.—Well, the Court can plainly see that the first question is withdrawn, or that the sec(Testimony of Lionel Heynemann.) ond is of a different nature.

- Q. Now, presume that a vessel is of a certain depth, and we will presume that a vessel is drawing say 30 feet—we will make it even figures—and she has 6,000 horse-power, with her reversed propeller, and she is going at 15 knots through the water; the propeller is reversed, all the power is thrown into it and it turns here a point to starboard at the end of a minute; supposing you cut 10 feet off the draught of that vessel, what will be the effect? Will the propeller be likely to have more or less effect in turning the vessel to starboard?
- A. I could not tell you that. I am not able to answer it.
 - Q. What do you think it would be?
- A. I would have to sit down and think seriously on that question.
- Q. But there would be less to turn to the side, would there not? A. Yes.
- Q. And presuming the same power at work it would be reasonable to believe that the turning would be greater, would it not?
- A. If I understand you correctly, you mean to say that in the same vessel drawing less water, she would turn quicker with the same power, with the same backing power?
 - Q. Yes, with the same backing power?
 - A. I think she would.
- Q. How would that ratio be? Would it be a mathematical one, just to state 20 to 30?
 - A. Decidedly not.

Q. As you added each foot, would it increase? For instance, as [874—751] you went down from 20 feet to 30 would the resistance increase mathematically? A. Let me state this—

Q. Just one moment: would the resistance increase

50 per cent only?

A. Let me state this, that in a good many of these formulas the displacement of a vessel enters as a straight factor; in other words, that vessels of different displacement would alter conditions of distance or any other factor that you are trying to get at in the straight arithmetical portion of displacement. But the formulas also contain the resistance. These resistances in a good many formulas are in the square.

Q. I thought so.

- Q. And the speed very often to the third power?
- Q. I thought so also. I am very glad to get that.
- A. So if you take vessels and compare them with each other, or the same vessel compared under different conditions of draught, you have a very complicated proposition to arrive at.
- Q. I know that, but what I want to get now is the tendency. You say that adding depth to the vessel increases the resistance, of course, on the turning?
 - A. It certainly does.
- Q. And that is increased by the square rather than by the unit?
 - A. Yes, under certain conditions again.
- Q. I am presuming the turning conditions I have described?
 - A. When a vessel turns there are a variety of re-

(Testimony of Lionel Heynemann.) sistances set up. I would not be prepared at this moment, or in fact I think at any time, to answer any

question about that.

Q. Did not that enter into your determination of what the "Beaver" would do under that theoretical question as to how far she would turn? You did not have any vessel of exactly the model of the "Beaver" to compute from, did you? [875—752]

- A. We never made any computations with regard to the amount the "Beaver" would turn.
 - Q. Are you sure of that? A. I am sure of it.
- Q. All the theoretical questions were given to you to work out, were they not? A. Yes.
- Q. And you worked on all of them with the other gentlemen? A. Yes.
- Q. You agreed in the results that they got, did you not? A. Yes.
 - Q. On all of them finally? A. Yes.
 - Q. Every one of them? A. Yes.
- Q. Oh, I see I misunderstood you. What you said was: "Under these conditions the 'Beaver' is making 13.572 knots per hour through the water, and without reducing speed changes her helm to starboard, and after her head under the starboard helm has swung one-half point to port her engines are then put full speed astern, and then her helm is put hard-a-port, would the vessel under these maneuvers be swinging rapidly to starboard at the end of one minute, or one minute and a half, after her helm had been put hard-a-port," and you answered "No, sir." That was a relative matter, then, as to what "rel-

(Testimony of Lionel Heynemann.) ative" means, Mr. Heynemann?

- A. It was an answer to the whole question.
- Q. But the question was, would she be swinging rapidly to starboard, and you said "no, sir," and you meant by that that relatively she would not be swinging rapidly?

 A. Yes.
- Q. There might be a great difference in what vessels might be doing at that time—different vessels, of different powers and different sizes?
- A. Well, yes, I would say there would be considerable difference. [876—753]
- Q. Well, not only considerable difference but very great difference. One might be doing twice as much as another, might it not, that is, twice as rapid?
- A. No, I should say that with vessels of more or less the same size, that a vessel to turn twice as rapidly as another would hardly be possible.
- Q. Didn't you say something about the resistance increasing as the square? A. I did.
- Q. So, of course, if there is a great difference in draught between the two, there would be a great difference in the way they would turn?
 - A. Yes, I should say so.
- Q. And if there were a great difference in power there would be a great difference in the way in which they would turn? A. Yes.
- Q. So one might swing rapidly with reference to the rate at which another would make? A. Yes.
- Q. So that that answer was purely a relative answer?
 - A. You mean relative as regards rapid or slow?

I am not quite sure that I understand the question. If there is anything more on that subject I would prefer that the entire evidence be read so that I could understand more the purport of it.

Q. I will withdraw the question and the answer, if you are willing, Mr. McClanahan. He simply says he does not know. He said he did not understand the question, and I will withdraw the whole thing.

Mr. McCLANAHAN.—But his answer is coupled with a request. Will you comply with the request, or don't you care to go into it? [877—754]

Mr. DENMAN.—I will let the record stand.

Mr. McCLANAHAN.—I object to the question and answer being withdrawn.

Mr. DENMAN.—Q. What can you say as to responsiveness to helm with vessels of the same tonnage, where one has narrow deep lines and the other has shallower broader lines; which is the more likely to respond to the helm?

- A. That depends on a great many conditions.
- Q. It does?
- A. Yes. The one vessel might have a natural tendency to turn quicker, might have a small rudder—
 - Q. Presuming the same rudders?
- A. Well, what do you mean by the same rudders,—the same size rudders, the same area?
 - Q. The same area?
 - A. And the same effective area of rudders?
 - Q. Yes.
- A. Now, I would like to have that question repeated. (Question read.) If you state that the two

vessels have the same tonnage it brings up a complicated situation because take, for instance, a vessel drawing 30 feet, and say with 40 feet beam, and a length of 400 feet, to produce a vessel that shall have the same displacement, say with half the length and half the beam, would bring about a very complicated situation that I am not able to answer just now.

- Q. I understand what you mean. Presume the same length.
- A. I may say that there was a vessel constructed more or less on that plan, the "Livadia," she was a Russian vessel, built with a beam of 150 feet and a length of about 300 feet. Very extraordinary conditions were obtained by that vessel, very extraordinary phenomena were observed.
 - Q. Did she mind the helm?
- A. I don't remember that feature of it. I just make that explanation [878—755] to show you that these questions are not so easy to be answered.
- Q. Well, taking it within the ordinary commercial types?
- A. You simply mentioned the same tonnage; now, you are adding the same length; then you would have to have an enormous multiplication of beam in order to get at the same tonnage. I don't know just exactly what you do mean, Mr. Denman.
- Q. You would not recognize that as the sort of a question that a practical man would put to you?
- A. I could easily understand your asking these questions for information, and I am giving you my answer to show you the difficulty of giving you the

(Testimony of Lionel Heynemann.) information that you want.

- Q. How is the resistance factor calculated? How does it vary in determining the stopping of the "Selja" in your results here? What does it vary with in your calculation?
- A. The formula for resistance that we have used shows a variation of resistance as the square of the speed.
 - Q. Is that the only variable in it?
 - A. Then the question of skin resistance comes in.
 - Q. What does that vary on?
- A. That varies according to certain experiments that have been made by various—
- Q. (Intg.) Pardon me, but what does it vary on in your formula in regard to the ship?
- A. We have taken a certain fractional coefficient as the basis of our calculations.
- Q. What does that vary on from one ship to another?
- A. On the amount of skin friction of the one and on account of the wave making resistance of the other.
- Q. But you must get something out of your different ships that you apply your variable to, or your constant to? You have [879—756] a constant I presume? A. We have a constant, yes.
 - Q. The variable you get out of the different ships?
 - A. Yes.
- Q. The skin resistance—what is that, the surface of the ship?

 A. The surface of the ship.
 - Q. The skin resistance, is that what we used to call

(Testimony of Lionel Heynemann.) in school molecular attraction? A. No.

- Q. Well, what is it?
- A. It is simply the resistance of a body going through the water, that is to say, of two surfaces, the water surface and the ship's surface; it is the friction between the two surfaces.
 - Q. That is due to molecular attraction, is it not?
- A. No, I do not think it is. The theory of friction is also more or less complicated. The theory of friction is that when one surface passes over another, that no two surfaces can be made absolutely even, that there are slight pimples you might call them, slight protuberances on each surface. You may say that both of these surfaces act like one file on another, and it is a lifting over of these little particles which is one theory of friction.
- Q. Then there is presumed to be a certain amount of molecular attraction in it?
 - A. Yes, that might be.
 - Q. But that is a very minor factor?
- A. I believe there are also theories of molecular attraction as underlying the theory of friction.
- Q. So that the second variable is this skin friction? A. Yes.
- Q. And that varies in your formula as the skin surface?
- A. As the actual amount of square feet immersed. [880—757]
 - Q. What other variable is there?
 - A. There is the wave-making resistance.
 - Q. The wave-making resistance—that is taken

(Testimony of Lionel Heynemann.) care of in your formula, is it? A. Yes.

Q. What does that vary as?

A. That is rather a complicated formula. The principal part of it is, of course, the speed. When it comes to slow speeds the wave-making is negligible.

Q. So you counted that out on the "Selja," did you?

A. Yes. But for higher speeds, when you get above 10 or 11 knots, it does begin to play quite a part. When you get to still higher speeds then the wave-making exceeds the frictional resistance.

- Q. But in this case you presume there was no wave-making element in determining how long it would take the "Selja" to stop, did you, going 3 knots at 3.10? A. No.
 - Q. What other variable is there?
 - A. There is the displacement.
 - Q. The displacement is a variable, is it?
 - A. Yes.
 - Q. What other one?
 - A. That is about all that I can remember.
 - Q. That is all you used, is it not?
- A. That is all we used so far as I can remember now.
- Q. Is there not friction coming from any other source?
- A. Yes, there are quite a variety of frictions. This is the friction of the propeller itself. There is what is called a wake factor.
 - Q. Did you compute the wake factor?
 - A. No, we did not compute the wake factor.

Those are all more or less negligible quantities. The only reason I mentioned that was because you [881—758] asked the question whether or not there were not other factors.

- Q. The water factor is a pull, is it not?
- A. Yes, it is a pull.
- Q. A pull back?
- A. No, a pull forward. The wake factor is a factor which acts with the vessel.
- Q. In other words, these other factors that produce a forward motion in the water—that motion helps the ship? A. Yes, sir.
- Q. In other words, the friction has gone on and becomes helpful to a certain extent? A. Yes.
- Q. What other variable is there that you did not use? A. We did not use the air resistance.
 - Q. What other one didn't you use?
- A. By air resistance I mean, of course, wind resistance. I don't necessarily mean wind resistance.
- Q. You mean the resistance of the superstructure moving through the air?
- A. Yes, that is what I mean. The air resistance is something else. We did not take the air resistance into account; we did not take the currents into account.
 - Q. Did you take the rough sea into account?
 - A. Yes, we took that into account.
 - Q. How much did you allow for that?
 - A. I don't remember.
- Q. Did you allow the same that the other gentlemen did? A. Yes.

- Q. How did you come to allow the same amount for sea resistance that the other gentlemen did?
- A. Because we made up our minds, based on literature that we had gone over, what would be a fair allowance.
- Q. What was that—how much of a factor was that in it? A. Not very much of a factor. [882—759]
 - Q. How much?
- A. Well, there was a question in relation to the slip.
 - Q. It could not be in the slip-
 - A. (Intg.) I think we took that and—
- Q. Just pardon me a moment; you did not take into account the variable that arises from the condition of the sea in determining how quickly you would stop after 3.10?

 A. No, we did not.
 - Q. But you did use that in other calculations?
 - A. We did, yes, sir.
- Q. What other variable is there that you did not use that you might have?
- A. I think I mentioned current; we did not use that.
- Q. All these questions have been how long it would take to stop her in the water; a current would not have any effect in her stopping in the water, would it?

 A. I think we went through that.
- Q. It would not. I think we agreed on that so far as the water is concerned.
 - A. I think we went through that.
 - Q. All these matters are with reference to her

stopping in the water. What other variable is there that you did not use that you might have used? Is there not an important one?

A. Let me see; I have mentioned the skin friction and I have mentioned the wave-making and the wake factor and the wind and the current and the waves. I don't remember.

- Q. Take your extraordinary freak Russian ship and—
 - A. (Intg.) Oh, you mean the form of the vessel?
 - Q. Yes. You did not mention that, did you?
 - A. No, I did not mention that. [883—760]
 - Q. You don't think that plays any part in this?
- A. Well, it does in so far as the form of the vessel regulates the displacement; the displacement is supposed to take those conditions into account.
- Q. So that if you had a rubber ball of the same displacement as the ship she would go just as far if she had a 3-knot speed at 3.10 as the ship would?
 - A. No, she would not.
- Q. Then there is something in the form, is there not? A. Yes, there is.
 - Q. It is a very serious factor, is it not?
 - A. Yes.
 - Q. Why did you not mention that before?
 - A. Because it did not occur to me.
- Q. Did it occur to you in the making of the calculation? You heard what Mr. Dickie testified in regard to that, did you not?
- A. No, I don't remember that he did testify to it. I don't remember that I heard him.

- Q. Would you say that it made any serious difference? Or would you contradict him if he had said it made a serious difference as to what the form of the vessel was?
- A. I should say it would make a serious difference. But when you put it in the way you put it with reference to a rubber ball and the shape of a vessel, such as vessels usually are—
- Q. But you have been telling me that there is a tremendous difference in the way in which the space was occupied, and the same displacement of the vessel, a tremendous difference in form between different shapes of vessels? A. Yes.
- Q. And I understand you now, that would make considerable [884—761] difference as to the time in which it would take a vessel to stop.
 - A. I should think it would.
- Q. And you did not take that into account at all in determining how long it would take the "Selja" to stop?
- A. No, I did not, and the reason I did not take that into account is because we are comparing more or less similar vessels.
- Q. How do you mean, comparing more or less similar vessels?
- A. The "Selja" was a vessel of 7,000 tons displacement and the "Beaver" a vessel of about 4,600 or 4,800.
- Q. What has that got to do with the stopping power? You would apply the same formula to the "Beaver" as you would to the "Selja," would you

not? A. Yes, I would.

- Q. The molds of those two vessels are quite different, are they not?

 A. Yes, they are distinct.
 - Q. They are distinct? A. Sure.
- Q. If the "Beaver" had the same displacement the "Selja" had but maintained her present lines, she would stop at a different rate through the water, would she not?
- A. Yes. I will make this statement, that there is another factor which I forgot to mention—
 - Q. Let us keep on this factor first.
- A. This bears a distinct relation to the information you are seeking to get. I refer to the block coefficient. The block coefficient takes the form of the vessel into account.
 - Q. The block coefficient does? A. Yes.
 - Q. That was utilized? A. That was utilized.
- Q. You had not mentioned that up to this point, had you? A. No. [885—762]
 - Q. What is the block coefficient?
- A. The block coefficient is that fraction of the prism consisting of the length, width and depth of the vessel as a square box compared to the actual amount of volume displaced by the water. It is the relation between those two. That takes exactly into account what you are trying to get at.
- Q. What was the block coefficient,—what was the formula for that you used with reference to the "Selja" in determining how much she dropped?
- A. The block coefficient contains the following data, if I remember correctly; it contains the two-

(Testimony of Lionel Heynemann.) thirds power of the displacement, the third power of the speed, and the horse-power.

- Q. What is that? Give me the three elements again.
- A. The three elements are the two-thirds power of the displacement multiplied by the third power of the speed and divided by the horse-power.
 - Q. What do you mean by speed?
 - A. That produces—
- Q. Answer the question, what do you mean by speed? A. The speed of the vessel.
- Q. Do you mean your engine-driving power, or do you mean her speed through the water?
- A. The speed through the water. Pardon me if I continue: This formula that I give produces a constant and this constant—known as the admiralty constant—also takes the matters into account that you are speaking of.
- Q. That is just what I want to get at; which one takes into account the difference in mold in the vessel?
- A. I think I would like an answer to a question changed; I [886—763] think I got these two factors mixed up between block coefficient and this constant. I think I started to state what the block coefficient was.
 - Q. Yes, and I was following you on that.
- A. That is a box that is figured with the length, breadth and depth of the vessel and compared with the actual volume of displacement.
 - Q. I want to get the formula for that that you

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(Testimony of Lionel Heynemann.) used in computing the rate at which the "Selja" slowed.

A. The formula for the box coefficient is about as follows. It is known as the Kirk Formula. Mr. Kirk builds in his mind around every vessel a certain box; that box has a middle body, a fore-body and an aft-body; he has given certain rules to figure these three bodies. I don't know that I have got these rules exactly in my mind. You can find them in every text-book.

- Q. But you applied them when you computed this? A. Yes.
- Q. What portion of the result that you have testified to here is gotten out of this block coefficient? Just give me the figures. A. I could not tell you.
- Q. What did you find was the box coefficient of the the "Selja"?
- A. I believe that the box co-efficient of the "Selja," as near as I can remember, was something like point 06—no, it was higher than that. It was something like .07 or .075. In other words, so that I am correct about that, the block coefficient of the "Selja" was .075. It means this: if you built a box around the "Selja"—
- Q. (Intg.) I understand what it means, I am trying to find out how you got it.
- A. I got it by working it out according to standard rules, [887—764] according to the Kirk Formula. There are different formulas. Mr. Durand, the Professor of Mathematics at Stanford, has given a rule for figuring the block coefficient. Mr. Taylor,

the Naval Constructor at Washington—they have certain rules there, but I don't remember just what those rules are, but I have figured by all three of them.

Q. They all agreed?

A. No, they did not all agree, but they agreed closely enough for practical purposes. I would not positively state that the "Selja's" block coefficient was .075, because that is simply a matter of memory. I made so many figures about it that I would not state.

Mr. McCLANAHAN.—Q. Mr. Heynemann, you said .075—you mean 0.75, do you not?

A. I mean .75; I mean seventy-five one-hundredths of the total volume that would be displaced by the box built around the vessel. I know that the "Selja" had a much higher block coefficient than the "Beaver."

Mr. DENMAN.—Q. What part does the block coefficient play in the checking? What percentage of it is attributable to that?

- A. I could not answer that question.
- Q. You had to know that, did you not, in getting this result?
- A. These things all enter into these formulas but when so many factors enter it is difficult to say.
 - Q. Is that a very important factor?
 - A. Yes, it is.
- Q. How does that checking power vary in the block coefficient—by the square?

A. The displacement, as I have said before, enters into certain calculations in the two-thirds power. The block only determines the displacement. The [888—765] two-thirds power is not an easy figure to grasp in your mind. It really means the third root of the square. It is not an easy figure to get into your head.

(Thereupon a recess was taken until 12 P. M.)

AFTERNOON SESSION.

Mr. McCLANAHAN.—I understand from you, Mr. Denman, there is no further cross-examination? Mr. DENMAN.—No.

Mr. McCLANAHAN.—And there is no redirect examination.

(The further hearing was thereupon continued until tomorrow, Wednesday, July 26, 1911, at 10 A. M.) [889—766]

Wednesday, July 26th, 1911.

[Testimony of James Dickie, for Claimant (Recalled —Cross-examination).]

JAMES DICKIE, recalled for further cross-examination:

Mr. DENMAN.—Q. Mr. Dickie, on your direct examination the following question was put to you:

"Q. If the Beaver' on her course out through the Golden Gate passes the North Heads at 1:37 P. M. and Red Buoy No. 2 at 1:45 P. M., without changing the revolutions of her engines, the distance between the two points being 2 knots, and proceeds under the same conditions

until 3:10 P. M., how far would she have travelled and at what rate of speed from 1:37 P. M."?

Your answer to that question was:

"23.25 knots, and the rate of speed would be 15 knots."

You recollect that, do you not?

- A. No, I am looking for it now.
- Q. It is the first question. A. Oh, yes.
- Q. You meant by that the same sea conditions, of course, continuing after they had left the North Channel? A. Yes.
- Q. Would the sea conditions have anything to do with the rate of speed of the "Beaver"? A. Yes.
- Q. Your son in testifying made a distinction between harbor and sea conditions.
- A. Sometimes the sea conditions are exactly the same as harbor conditions, but not always.
- Q. Yes, but he used the phrase "under sea conditions"; what does that mean?
- A. That means when we take a ship on the trial trip and get 12 or 13 knots out of her, we take off half a knot or three-quarters [890—767] of a knot, as the case may be, for sea conditions.
- Q. Did you ever take off anything more than that for sea conditions? A. Not generally.
- Q. Not generally; in other words, you would not be likely to have a trial trip on a day that presented unusual conditions?
 - A. We have had trial trips on days that did pre-

sent unusual conditions, but we made an allowance for that.

- Q. But on trial trips the idea is to take out as many of the variables as possible? A. Yes.
- Q. And to get down to your constants, to have a fair sea, a smooth sea, if possible? A. Yes.
- Q. That is so as to get down to a close calculation. All the other elements disturb your calculation in a way that you cannot mathematically ascertain, do they not? A. Yes.
- Q. I do not recollect whether it was you or one of the other experts, but it seems to me that you testified that a swell without a wind into which a vessel was heading would not affect her speed; is that correct?
- A. If the swell was not large it would not affect the speed. It would affect the speed but very little.
 - Q. Suppose the swell were very large?
 - A. Then it would affect the speed.
- Q. And affect the speed considerably, would it not?
- A. In a very fast ship not so much, but in a slow ship a great deal.
- Q. Would that affect the ship's speed whether the sea was running aft?
- A. If there was no wind; no. The sea does not run.
- Q. I am presuming this: suppose there is a heavy swell; no wind; the storm has gone down but you have a heavy swell at sea? [891—768]

- A. Then it has no head and it has no tail, just simply a swell.
 - Q. Does it have any movement?
- A. No lateral movement; a slight lateral movement but it comes back to the same position again.
- Q. The water does, the individual molecules of the water, but isn't there any movement?
- A. If you put a log of wood in the water that log will not travel, that log will move, but will come back to about the same position.
- Q. Do you mean to assert then, Mr. Dickie, that because the molecules of water remain in practically the same position, that they transmit no lateral force to one another and through one another?
- A. The wave moves a certain distance but it comes back again like a pendulum; that is, providing the water is deep enough.
 - Q. I am presuming that the water is deep.
- A. That the water is deep. If the water is shallow the sea travels; that is what causes breakers.
- Q. You mean to say there is no resultant lateral motion in a swell at sea transmitted through the molecules of the water?
 - A. Let me put it in another way for you.
 - Q. No, answer my question, please.
 - A. I don't understand your question.

Mr. DENMAN.—Mr. Reporter, read the question to the witness.

(Question read by the Reporter.)

Q. That question has got to be answered yes or no. Can you answer it? A. Yes and no.

- Q. Which is it, yes or no, both?
- A. Both of them.
- Q. It is both of them?
- A. Both of them. [892—769]

Mr.McCLANAHAN.—Now, make your explanation, Mr. Dickie.

A. If I place a log of wood say a mile off Pt. Reyes, or any position in the water, and I come back 3 or 4 hours afterwards I will find that log has not changed its position. It has changed its position 2 or 3 times but it has come back there again.

Mr. DENMAN.—Q. How is it if there is a storm at sea say 1,000 miles away, perhaps, and the storm ends there, or turns to the right or the left and does not come on ahead, that you will find transmitted clear up to the shore 1,000 miles off the wave motion created at sea? A. Yes.

Q. I say, how does it get there?

A. Because the one wave acts upon the next one, and upon the next one, and upon the next body of water, and when this fellow falls the next fellow rises, and when that fellow falls the next fellow rises, and when that fellow falls the next fellow rises, and then there has been a lateral transmission of power for 1,000 miles.

Q. Yes, but no lateral transmission of the molecules of the water for those 1,000 miles? A. No.

Q. And when that hits against the cliff 1,000 miles away, that power that jars the cliff and sends the spray over the top of the cliff is a power created 1,000 miles away? A. Yes.

- Q. That is transmitted, is it? A. Yes, sir.
- Q. Do you want to say that if that hit the broadside of a ship it would have no effect on it?
 - A. But you are getting away—
 - Q. Answer my question, please, Mr. Dickie.
- A. It will have a local effect, yes. For instance, if it [893—770] hits the broadside of a ship she will swing a little but then she will swing back to the same position again.
 - Q. She will? A. Yes.
- Q. How is it that the power hits the cliff and jars it and sends the water over the top of it?
- A. Because it cannot transmit it to the next wave and consequently it hits the cliff and then falls back.
 - Q. And this is transmitted to the ship, is it not?
- A. Yes, but the next time it comes again she just swings.
- Q. But it is already put into the ship—that power is.
- A. No, it is not put in the ship. The motion of the molecules of the water swing like a pendulum and they swing back again and have the same motion.
- Q. But if the power is translated into the ship, they never come back again?
 - A. The ship follows the molecules of the water.
- Q. But if the power is translated into the ship and the ship is travelling that much, there is no molecular return on the part of the ship.
- A. And there is a molecular return on the part of the water and that takes the ship back again with it.

Q. But if that power is expended in driving the ship broadside—

A. (Intg.) It is not expended, it is only stored up.

Q. Then why is it, Mr. Dickie, that on the lee side of a ship you have quiet water in a swell?

A. Oh, you are talking about the wind now. That is a different proposition altogether.

Q. All right, take the side away from the swell.

A. There is no side away from the swell.

Q. What is that?

A. There is no side away from the swell. [894—770]

Q. Do you mean to say that a swell has no direction? A. No direction.

Q. It has no direction? A. No direction.

Q. If a swell is described by Captain Lie as a westerly swell, he describes a thing that is non est?

A. He describes a thing that does belong there because it is caused by a westerly wind and the westerly wind is still there.

Q. But suppose it is calm?

A. Well, either one side of the wave is the same as the other side of the wave; either that or everybody is wrong—not me. I should have brought up my book on the subject—White's Naval Architecture. It brings that out pretty clearly.

Q. Are you correct or is Mr. White correct?

A. Mr. White is correct and I am correct and Mr. Froude is correct.

Q. Did you ever hear of any sea captain who

(Testimony of James Dickie.) would agree with you on that?

- A. I never asked of a sea captain to agree with me.
- Q. Did you ever talk it over with any sea captain?
- A. I will tell you what I have done-
- Q. (Intg.) Did you ever talk it over with any sea captain?
- A. Not particularly, no, sir, but I will tell you what I have done: since this case came up I put a log of wood over in the creek, at Oakland Creek, and watched the swell from the steamer's paddle and it did not move, it only swung.
- Q. That was right on top of the wave itself, was it not? A. It was in the wave.
 - Q. But it did not have any water down below it.
- A. I forget the depth that a wave travels down. I think it is nine times its height, if I remember right. I will not be [895—771] positive about that. The foundation of the wave is about nine times its height, I believe. But below that the water is absolutely still. I will not be positive of the figure 9, but it is somewhere in that direction.
- Q. But there is a difference in the rapidity of the motion as you approach the surface of the wave, of course? A. Yes.
- Q. And the greatest agitation is at the surface of the wave?

 A. Yes, the greatest movement.
- Q. So, if the ship were going through the water, presuming that the ship had a draught of 20 feet,—supposing it were going through the water and the log was out behind floating on the surface, the log would have a different set of forces acting on it,

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would it not? A. Not except there was wind.

- Q. But didn't you just say that the variation of forces at the surface of the water in a wave was different from what it was beneath?
- A. I did, but suppose the wave moves 5 feet one way and 5 feet back again, it comes back to the same position, doesn't it?
 - Q. Did you ever see a swell come back?
 - A. The timber does not move any.
 - Q. Did you ever see at sea a swell come back?
- A. It has an up and down motion and a pendulum motion.
- Q. Can't you see a wave move, can't you see a wave move any?
 - A. No, positively, not except there is wind.
 - Q. Can't you see the ripple move?
- A. But the ripple is caused by the wind; that is motion.
 - Q. Have you ever seen a swell move at sea?
- A. No. It apparently moves, but it is just the same as a sheet of paper you have seen in a panorama, it is just the same motion. [896—772]
- Q. You can see the motion move, can you not—it has a beginning and an end? A. No.
- Q. Take the crest, does not the high place move on?
- A. Yes, the crest travels but the molecules of water do not travel.
- Q. We admit that, but they transmit force laterally, do they not? A. No.
 - Q. How does the crest come to travel if it is not

(Testimony of James Dickie.) transmitted laterally?

- A. It is transmitted vertically.
- Q. Is not the resultant lateral? Is not the resultant move of the crest lateral? A. No.
 - Q. What do you mean by "lateral"?
 - A. Horizontal.
- Q. Well, then, does not the crest travel horizontally?
- A. It apparently travels horizontally but the molecules of water do not travel.
- Q. Let us omit the molecules. We will suppose them to be gone from this point; but you have established that the molecules themselves have a very small radius of motion. We will presume that. My question is what happens to the power they transmit. You admit great power is transmitted, do you not?
 - A. It is transmitted vertically.
 - Q. And its resultant is horizontal, is it?
- A. No. You can have the resultant anywhere you like. You can transmit power anyway.
- Q. But if the waves beat the cliff 1,000 miles away from the storm, the resultant force is transmitted horizontally, is it not?
- A. No. The cliff is an object and that wave travels up against it. Then you have a different motion. It flies up in the air. [897—773]
- Q. But how did the force get there? How did it travel that 1,000 miles from the storm at sea to the cliff, if it was not transmitted laterally by the motion of the molecules of the water?
 - A. Let me ask you a question. How does elec-

(Testimony of James Dickie.) tricity get along the wire?

- Q. Then you think it is an electric force?
- A. No, it is not an electric force.
- Q. It is a physicial force?
- A. Yes, it is a physical force.
- Q. You say there is no resultant lateral force?
- A. I did not say there was no resultant lateral force; I said there was no resultant permanent lateral force.
- Q. What is it that moves the water against the cliff if it is not force in the form of motion?
- A. There is that pendulum motion that I spoke of to start with. That is all you have of lateral motion. When it cannot swing back, if it hits something it is just the same as a pendulum hitting something, it stops. It takes a certain amount of force to stop it. If you stop it it flies upwards.
- Q. Suppose it hits the side of a ship and flies upwards.
- A. If the wave is small in proportion to the ship it is the same thing.
- Q. In other words, the force is translated into the ship? A. Into the ship.
 - Q. And to the extent—
- A. (Intg.) That is, it is hit on the side of the ship and is absorbed.
- Q. Now, suppose it is the bow of the ship, would the same mechanical principles be at work, the only difference being the question of form and the surface exposure? [898—774]
 - A. No, you have a different proposition there.

The wave is split and goes on the two sides.

- Q. Do you mean to say there is no transmission of force into the vessel itself?
- A. It is not a lateral transmission, it is a vertical transmission. It is the motion of the ship. If the ship could get steady you would not know the difference. What you lose at the bow you would pick up at the stern.
- Q. Would it be the same in striking the ship as the water striking the cliff?
- A. No. You would get the resultant at the other end.
- Q. How could you get the resultant at the other end if the force is exhausted in striking the ship?
- A. Let me put it to you in another way and I will prove to you that it would be like moving in a swell; if a ship has an ordinary shaped bow and a scow stern, she will move ahead in a swell without wind.
 - Q. She will?
 - A. Yes. That is a well-known fact.
 - Q. Then there is a translation of these forces?
- A. Vertically. It is the vertical force under the slant stern and striking it at an angle that forces the scow ahead. You are getting very deep into this thing.
- Q. Oh, no, it is not deep at all. I have no difficulty in following you at all, and I am not a particularly skilled man. That seems to me to be an entirely reasonable supposition, assuming your hypothesis is correct, that that resultant force is vertical.

- A. It is vertical, with a pendulum swing.
- Q. It is more than a pendulum because the force does not come back to the center of the sea that is sent to the cliff.
- Mr. McCLANAHAN.—Are you testifying now? [899—775]
- A. It does if there is no wind, or else all authorities on the subject are wrong.
- Mr. DENMAN.—Q. If the force that is sent out 1,000 miles from shore by the storm, when it strikes against the cliff it comes back to the center of the sea, does it?
- A. Part of it comes back into the sea, which makes a swell; the other is extended vertically, flying up in the air vertically or breaking something.
 - Q. It is extended in indenting the cliff?
 - A. Yes.
- Q. And that as it strikes the cliff it is a horizontal motion?

 A. That is the pendulum swing again.
- Q. It may be a pendulum swing but it is a horizontal motion; it never swings back, does it?
 - A. Yes, it swings back.
 - Q. When it strikes the cliff?
- A. Part of it swings back and part of it goes up in the air if the cliff is vertical.
- Q. And part of it is taken up in rearranging the molecules of the cliff, is it not? A. Yes.
 - Q. And that is what wears cliffs away, is it not?
- A. Yes. And let me get back to one fundamental thing, there is no forward motion to a sea, no permanent forward motion to a sea except there is wind.

- Q. Then how is it that it is transmitted 1,000 miles if there is no forward motion? I admit it is not the water but I am talking about the force.
 - A. The force is an unseen thing.
- Q. I don't care whether it is unseen or not. We know it is there. A. It is transmitted vertically.
- Q. How can it be transmitted vertically and reach a horizontal destination?
 - A. It is only apparent motion horizontally.
- Q. Is the thing that hits the cliff only apparent or has it [900—776] travelled 1,000 miles?
 - A. No, it has the pendulum motion.
- Q. Is there one swing of the pendulum for the 1,000 miles?
- A. Yes. If you drop a stone in the middle of a lake the waves will go to the side.
 - Q. And you say there is no resultant lateral force?
- A. And anything in the path is just lifted and dropped back again as they pass; anything in the path of the waves is just lifted vertically and dropped back again to where they were.
- Q. Suppose you were in a small boat at sea, in a very heavy swell—presume it is a westerly swell and its force deceitfully appears to be travelling along with the course of the swell in an easterly direction, and you were in a small boat at sea, would you rather be out in the open sea than on the easterly side of a large Atlantic liner that was lying in the trough of the sea?
 - A. I would not care which side I was on.
 - Q. That is, the conditions would be exactly the

same on the easterly side of the liner as they would be on the westerly side, and 1,000 feet away from it?

- A. Yes, except that there was wind.
- Q. Have you got the blue-print that was prepared, plotting the stopping of the "Selja" which Mr. Heynemann had here yesterday?
 - A. I have seen it. I think it is here.

Mr. McCLANAHAN.—You mean the blue-print prepared by Mr. Heynemann?

Mr. DENMAN.—I don't know who prepared it, his name is on it.

The WITNESS.—He prepared it.

Mr. DENMAN.—Q. Did you examine it?

- A. Yes. [901—777]
- Q. Is it correct?
- A. I think it is pretty near correct.
- Q. Does that agree with the figures you first gave as the time it would take to stop?
- A. His are theoretical figures, mine are practical figures. There is a slight variation.
 - Q. You are a navigator then, are you?
 - A. No, I am not a navigator.
 - Q. What do you mean by practical?
 - A. Taken from data.
- Q. Well now, you can get me that data, can you not? A. Yes.
 - Q. I would like to see that.
- A. I will tell you what it is taken from—it is taken from the "Wisconsin," and the data comes straight direct from the Bureau at Washington.
 - Q. And you based all your conclusions on that

(Testimony of James Dickie.) data? A. For the "Selja" only.

- Q. For the "Selja" only? A. Yes.
- Q. And you estimated the stopping time of the "Selja" on the stopping time of the "Wisconsin"?
 - A. Yes.
 - Q. What is the "Wisconsin"?
 - A. A battleship, built at the Union Iron Works.
 - Q. What is her maximum speed?
- A. If I remember right, the maximum speed was 17 knots; 16 or 17 knots. I am talking now from memory.
 - Q. Yes, I know; it was about that, was it?
 - A. Yes, about that.
 - Q. What was her tonnage?
 - A. The displacement was about 11,000 tons.
 - Q. What was her length?
- A. 348 feet, I think. That is a matter of record; it is somewhere about that. [902—778]
- Q. What time did it take the "Wisconsin" to stop in?
- A. We have her timed from 6 knots; it was 20 minutes.
 - Q. From 6 knots, and it was 20 minutes?
 - A. Yes.
 - Q. Have you got the gradations of time down?
 - A. No.
- Q. Then you do not know when she was at 3 knots, according to that data?
 - A. I can only form that theoretically.
- Q. How did you reduce down the various periods of time? Was it divided in half for 3 knots?

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- (Testimony of James Dickie.) A. Not quite, but very nearly.

 - Q. Very nearly? A. Yes.
- Q. Don't you know that the lower portion of the reduction is very much slower? A. I know it.
 - Q. Why did you divide it evenly then?
 - A. I did not divide it evenly.
 - Q. Where did you place the figure?
 - A. I gave the line a little curve.
 - Q. How much of a curve?
 - A. I don't remember now.
- Q. Was that curve based on any experience you ever had?
- A. I have had more experience than any other man on the Pacific Coast. Yes.
- Q. What experience have you had in the matter of determining the curve, as to the stoppage of ships?
- A. I should have brought it up with me. I have it absolutely, taken every half second.
 - Q. On what ship?
- A. The cruiser "California" and the cruiser "South Dakota" and the cruiser "Milwaukee" and some others.
 - Q. You have those curves for those cruisers?
 - A. Yes.
- Q. And all these conclusions you have come to, have been based on the Government reports on these war vessels? [903—779]
- A. No, these are my own. I had a special machine for taking them in launching. It is the same performance.

Q. In launching? A. Yes.

- Q. Are not the vessels very light, under ordinary launching conditions?
 - A. The "South Dakota" was 6,180 tons.
- Q. I mean light as compared to their normal draught lines.
- A. Yes, but that does not make any difference. It does just as well.
- Q. Your theory is that a barge would go just as long as a yacht? A. I did not say so.
- Q. You say that the draught of a vessel does not make any difference?
- A. I say the displacement makes a difference but that is easily allowed for.
 - Q. Does not the draught make a difference too?
 - A. Very slight.
 - Q. A very slight difference? A. Very slight.
 - Q. Is not the water more compact as you go down?
 - A. No.
 - Q. Is not the resistance greater as you go down?
- A. No—positively. I know that a submarine goes the same if she is 2 feet under water as if she is 20 feet under water. She goes with the same speed and the same power.
 - Q. Does she stop in the same time?
 - A. She stops in the same time.
 - Q. Have you ever experimented on that?
 - A. I have the data for it.
 - Q. What is the data for the submarine?
- A. It made no difference how far down you went. It made no difference.
 - Q. Is that true as to stopping?

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A. I don't know about [904—780] the stopping of submarines. I don't know anything about that. If it does not make any difference in the propulsion it does not make any difference in the stopping because stopping is only stored up energy used up.

Q. Let me see your data as to speed?

A. You mean as to the stopping of ships?

Q. Yes. A. You want the launching data?

Q. Yes.

A. I don't have it with me. I published a paper on the subject, a paper which was read in England, about 5 or 6 years ago. I have that in my office. It was taken every half second all the way down; all the way to a stop. First I figured it and then made machines so that I could check up the figures and the figures checked up very well.

Q. That was a case where your theory and your practice worked out?

A. Yes. And I can explain the difference between mine and Mr. Heynemann's here. No man can tell when a ship is stopped. There is a long period at the tail-end when neither theory nor practice can tell. For instance, an ounce of pressure would move the "Selja" but there is no man can tell how much it would move her.

Q. So that the tail-end of the calculation—

A. (Intg.) The extreme tail-end is always a little doubtful. One barnacle in a ship will make a difference. I don't think you could measure it but it would be there. The barnacle would make less difference

(Testimony of James Dickie.) at the tail-end of the curve than it would at the first end of the curve.

- Q. All these observations as to stopping that were made on these various ships, were made in as calm a sea as possible?
- A. In as calm a sea as possible, general trial trip conditions. I was at one—I can't remember which it was, I think [905—781] it was the "Olympia" weighing about 5,000 or 6,000 tons, and there was a question amongst three or four of us as to when the ship was stopped, and finally we threshed the thing out and came to the conclusion it would never stop unless there was some force against it, theoretically. The captain said, "I will settle that, she is stopped now."
- Q. Well, being on board, you were compelled to accept his dictum, were you not? That is the usual condition of those on board the ship, that they have to finally accept the captain's dictum as to whether or not the vessel is stopped or moving; that is correct, is it not? A. No.
 - Q. Well, I will admit that for you, Mr. Dickie.
- A. When I started to take stopping data at the Union Iron Works, I asked every captain who came on the dock to dock his vessel, for about 9 or 10 months, how far a vessel would travel and I got the wildest answers—from feet to miles. They were absolutely helpless, absolutely useless. They were intelligent men too. And I didn't blame them.
- Q. How about those men who had tried it? That is due, of course, to two things, is it not—first, that

(Testimony of James Dickie.)
many men are not good observers?

A. No.

Q. And the other is that the stopping time down at the end is very difficult to determine, is it not?

A. It is very difficult to determine, yes, at the tailend it is very difficult to determine it.

Q. And that slow motion would be subject to a large number of variables, that is, it would be more affected than variables than when the vessel is moving rapidly; I believe you said that, did you not?

A. Yes; the least wind would have more effect, a small quantity of wind would have more effect on the [906—782] slow speed.

Q. And likewise the agitation of the water, making a different amount of skin exposure, for instance.

A. There would be no difference in the skin exposure practically.

- Q. Is there any particular force existing—I don't know this, I am asking you to get information from you; is there any particular force existing at the water line of a molecular nature exerted on the ship? For instance, we know that the skin of the surface of the water has a force in it that does not seem to be present in the body of the water itself and will sustain small insects and that sort of thing.
 - A. I don't understand your question.
- Q. Is there any molecular attraction between the surface of the water and the side of the ship that does not exist below? A. No.
 - Q. Are you sure of that, Mr. Dickie?
- A. I am sure of it because I know it makes no difference in the tank experiments, whether you take

(Testimony of James Dickie.) the wetted surface down at the bottom or up near the top.

- Q. You would have your force exerted in both cases?

 A. There is so much wetted surface.
- Q. But you would not be able to distinguish in your experiments between the force exerted right at the surface and at the bottom?
 - A. Yes, you would.
 - Q. Why?
- A. Because they have tried them, extremely shallow vessels right at the top of the water and they have tried them extremely deep. Sometimes as you go deep the results get worse. They get better as you go down to a moderate draught. Three-fifths is about the best position. [907—783]
 - Q. That is where your tank—
- A. (Intg.) Take a vessel 10 feet wide and drawing about 4½ feet of water, that is about the best proportion for that width, for the least resistance.
 - Q. That is better than wider or narrower?
- A. Better than wider or narrower; slightly, but not very much.
- Q. I have not been able to make my question clear to you, but I don't believe it is of sufficient relevancy to make any difference. Suppose the steamer "Beaver" is proceeding through the water at the rate of 12 knots an hour; her engines are stopped and put full speed astern, the helm put hard aport, and the full strength of the engines going astern, say of 4,000 horse-power—
 - A. (Intg.) Let me correct you there; you could

(Testimony of James Dickie.) not get 4,000 horse-power at the start, or the half of it.

- Q. How long would it take to develop it?
- A. You would be nearly stopped before it was fully developed.
- Q. How long would it take to develop it? At what rate would it develop?
- A. I cannot answer that right off. That is a very intricate thing to figure out. I can figure it approximately. If you have a large wheel and you stop her at 12 knots you probably for a few seconds will not be able to turn your engine over at all and she is developing no power; then gradually the engine will begin to speed up and as it speeds up it develops the power.
- Q. Suppose the link is thrown up from full speed ahead to full speed astern without stopping.
 - A. It would make no difference.
- Q. The difference would be in revolutions, would it not? [908—784]
- A. It would be in revolutions, yes. Revolutions are everything. If there are no revolutions there is no power.
- Q. Suppose the engines show at the end of a half minute 70 revolutions going astern'.
 - A. At the end of a half minute?
 - Q. Yes, suppose that were the case.
- A. Well, quite possible; I think it is within the bounds of possibility, I am not sure.
- Q. And the vessel ran for a minute and a half altogether from the time the reversing signal was

(Testimony of James Dickie.) given, how much would you say her head would swing under those conditions?

- A. I don't know. I have only got one bundle of testimony that I plotted down and that had nothing to do with over 10 knots in speed. What happened between 10 and 12 knots I don't know.
- Q. It had nothing to do with any ship that had the horse-power indicated, did it?
- A. That ship that I refer to that was plotted, had not the horse-power.
- Q. You have never plotted any with horse-power of this amount?
- A. No, not of this, but I have had them greater and less. Are you after stopping or after steering just now?
 - Q. I am now after steering.
- A. Well, the rudder has very little directive force when the vessel is going astern.
 - Q. That is taken up by some other place, is it not?
- A. It depends upon the shape of the rudder and the shape of the propeller and upon the pitch of the propeller and a thousand and one other conditions.
- Q. The directive force of the rudder, while the vessel is still going ahead, is consumed by forces developed by the propeller?

 A. Yes.
- Q. The resultant of those forces may be to throw the head of the vessel to one side or the other?
- A. Yes. I would like to show you this diagram that I plotted here. [909—785]
 - Q. Wait just a moment and I will take that up

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(Testimony of James Dickie.)

later. Have you ever made any experiments of this kind yourself?

A. No, I don't know of a case where it has been

done on this coast.

Q. You don't know of it? A. No.

Q. You have not heard of any being recently

done, have you? A. No.

Q. What would you say would be the maximum that the "Beaver" would turn in points in a minute and a half? A. I don't know.

Q. Would you say that three points would be too

much? A. I would not say anything.

Q. You would not question three points if it was suggested to you, would you, as a possible turn of the vessel?

A. It might be one way, it might be to starboard

or to port, I would not say which one.

- Q. I am talking as to the degree, as to the amount, and not as to the direction. Presuming that the resultant of these forces is to starboard, would a swing of three points in a minute seem to you an excessive amount for it to swing?

 A. I don't know.
 - Q. You don't know? A. I don't know.
- Q. You would not question three points if it were suggested to you as a possible swing in that time?

A. I would investigate.

Q. You would investigate? A. Yes.

Q. But from your present knowledge you would not question that, would you?

A. I would question everything.

Q. From your present knowledge would you

hazard the suggestion that it was unreasonable?

- A. I tell you that I don't know; I can't give you any more. [910—786]
- Q. You don't know. There is nothing in the study you have made of this thing—
- A. Yes, there is a study from 10 knots downward that I could answer pretty positively what would happen—from 10 knots downward, and with a right hand wheel.
 - Q. But going at 12 knots you would not say?
 - A. I don't know.
- Q. As the result of the calculations you have made from 10 knots down—
 - A. (Intg.) Not calculations.
- Q. As a result of the knowledge you have gained from examining these vessels going at the rate of 10 knots downward, what would be your impression?
 - A. I would not have any.
- Q. You would not have any; in other words, it does not illumine your mind at all?
 - A. Not a particle, from 10 to 12 knots.
- Q. She might swing 3 and she might swing even 4 points in a minute and yet there is nothing in your calculations on this question that would lead you to doubt that?
- A. I am pretty positive what would happen below 10 knots, but I am not positive above it.
- Q. I am not asking if you are positive; I am asking you what impression you gained—
- A. I don't start out with impressions. I start out trying to clear my mind of all impressions I have.

I want to be positive.

Q. I am asking you to clear your mind of all impressions you have. A. I have not got any.

Q. You don't expect the Court to believe that, Mr.

Dickie, do you? A. Yes.

Q. I am not saying that flippantly at all but I don't think [911—787] you are describing your own condition of mind.

A. I am describing my own condition of mind exactly.

Q. If a man comes in and states to you a certain proposition of the speed of a vessel through the water, and you never computed that at all, never computed the exact conditions he describes, you don't have any opinion as to the reasonableness or the sanity or the credibility of his statement.

A. Not unless he is very wild. For instance, if you tell me the "Beaver" made a speed of 25 knots I would say you were talking through your hat.

Q. You would not say that the statement that she swung three points is very wild?

A. I don't know.

Q. You would not consider that very much, would you?

A. 3 points is quite a chunk, it is quite a piece.

Q. Do you think that is a very wild statement?

A. I don't know.

Q. Then it is not a statement that would impress you as being very wild?

A. It is a statement I have not given any thought to, and I would not express an opinion until I had.

- Q. Then it is not a statement that would impress vou at first blush as being very wild?
- A. I don't know. If anybody said that to me I would take the statement and write it down and then investigate it and then I would come to a conclusion whether he was right or wrong.
- Q. All the years of experience you have had do not help you to determine whether or not your impression of that would be that it was a wild statement?
 - A. No.
- Q. Now, suppose I were to tell you that the "Beaver" under those conditions would actually swing 5 points in a minute and [912—788] a half, would that strike you as a wild statement?
 - A. I don't know I say.
- Q. You have been studying this question with your son, have you not?
 - A. No, he has been studying it with me.
- Q. Your son has been; as far as his experience in that line is concerned, has been in your office and under your direction?
 - A. He has been doing the mathematical part.
- Q. He has called upon your experience and your knowledge in these things in making up his mind?
 - A. No, he makes up his mind without me.
- Q. I say, in making up his mind he calls upon you for the advantage of your experience and knowledge? A. He tries to get the facts.
- Q. I am not questioning that but he naturally turns to you for advice?
 - A. No, he does not. He would question a state-

ment that I would make to him the same as he would question any that you would make, just the same.

- Q. Oh, no, I think not. I will not admit that.
- A. He would, exactly.
- Q. Mr. Dickie, have you found Mr. Heynemann's blue-print yet?

A. No, I have not found it.

Mr. DENMAN.—Mr. McClanahan, have you that blue-print?

Mr. McCLANAHAN.—I think it is in my office.

I will go and see if I can find it.

Mr. DENMAN.—Q. I hand you a diagram, Libelants' Exhibit 16. That is what you referred to just now as being all you know?

- A. Yes, all I plotted. That was the direction the ship took when she was backing. That was the time she took to back. It is all laid out to scale. These little circles are the spots taken from the Captain's testimony. [913—789]
- Q. I believe you testified the other day you did not know what horse-power this vessel had.
 - A. Which vessel.
 - Q. This vessel you are referring to on the exhibit.
 - A. Yes.
 - Q. You said you didn't know?
 - A. I don't know.
 - Q. And you don't know?
 - A. I didn't know; but from data I can always find the horse-power if I get the displacement. And I can get the displacement very easily. For instance, on the "Selja"—and without any question from the

Captain at all— I was within 40 tons of the displacement of the "Selja" when he told me her draught of water.

- Q. What was the horse-power of this vessel?
- A. I don't remember. I cannot keep these things in my head. The horse-power I got for the "Beaver" was a long way nearer than the facts—the supposed facts.
 - Q. A long way nearer what? A. The truth.
- Q. By the supposed facts you mean in these theoretical questions that were given you?
- A. No. For instance, you gave on the trial trip 17.6 knots. It should have been 17.06. But she did not make it. She made it with the tide. The data says so.
 - Q. With the tide with her or against her?
- A. With the tide with her; between two land points.
- Q. When she made 17.06, then she had the tide with her?
- A. Yes. She never made 17.06 through the water. I mean to say, the data calls for 17.6.
- Q. Have you been able to determine how much the tide did affect her?
- A. Well, reading from her data, when she turned around the other way she did not make such good time going back.
 - Q. Do you know when the tide turned on that day?
 - A. No. [914—790]
 - Q. Did you ever know? A. No.
 - Q. Do you know anything about the relative forces

of water in that bay at different times? A. No.

Q. The mere knowing of whether the tide was rising or falling, does not determine tidal currents and eddies, does it? A. No, sir.

Q. What do you mean by saying no nearer to the

truth; what do you mean by that?

A. Because 17.6 is above what anything goes with that power, of the character of the "Beaver."

Q. And you knew that, did you, at the time that these theoretical questions were put?

A. I did not know that until I investigated it.

Q. You say it is above what would be made by vessels of that type? A. Yes.

Q. You knew that before you began this investiga-

tion, did you not?

A. No. I only investigated that along with other things.

Q. Then all these theoretical questions are based

on erroneous data?

A. They are not; they are based on correct data,

Q. As I understand it, your questions are based on a trial trip—

A. Some of them are absolute, some of them are liable to error. Some of them are absolute; for instance, when you take the relative pitch of a vessel's wheel, and so forth, those are absolute.

Q. Yes, I know that, but the conditions here are not the exact truth as you have since discovered them—in some respects; that is correct, is it not?

A. That is correct.

Q. Can you tell from this diagram here, referring

to Mr. Heynemann's diagram, how much distance the "Selja" would cover if [915—791] she was going at the rate of 6 knots, her engines were stopped, and she dropped to 3 knots without any assistance at all, assuming trial trip conditions?

- A. No, I don't know the scale of that.
- Q. You don't know the scale of it?
- A. No, I don't know the scale of it.
- Q. It would not be of any assistance without the scale?
- A. It would not be of any assistance without the scale. I could read it if I had the scale. The scale is on it somewhere there, I think.
- Q. This seems to show what it would do in dropping from 6 knots to 3 knots with the assistance of—
 - A. (Intg.) With the assistance of 20 revolutions.
- Q. Now, I say from this can you compute what it would be without the 20 revolutions, in dropping from 6 knots to 3 knots?
 - A. No. You would have to begin again.
- Q. Coming back to the "Hankow" could you say that she had 2,000 horse-power?
- A. I think it was about 2,000 or 2,200, or something like that.
- Q. She would be about half the horse-power of the "Beaver"?
 - A. Half the horse-power of the "Beaver."
- Q. It is fair to presume, is it not, that if the turning motion to one side or the other is affected by the propeller, that the more horse-power you have the more it will be affected—it is fair to presume

that, is it not? A. That is questionable.

- Q. You say it is questionable? A. Yes.
- Q. What do you mean by "questionable"?
- A. Well, I would not say so without investigating it. [916—792]
- Q. What would be your impression, what would you expect to find?
- A. I would not expect to find anything. When I start out to investigate anything I sweep everything out of my mind.
- Q. Now, I am asking you not to sweep anything out of your mind but to use all the scientific insight you have, would you expect to find that the vessel would swing more the more the horse-power?
- A. I would expect a vessel to steer better; a finer vessel would be more under command than a full vessel.
- Q. I am taking the same vessel, the same draught, the same speed conditions at starting, the same condition of water and air; in one case you apply half your horse-power to a right hand wheel and in the other all your horse-power to a right hand wheel; looking at that question with the full power of your scientific attainments, and—
- A. (Intg.) Going ahead I should say that the vessel with more power would steer quicker. There is no question about it going ahead. But going astern I don't know.
- Q. If the reversing motion of the propeller throws her head say half a point to starboard with one-half the power of the engines exerted going astern, the

vessel still having a forward motion, would you expect that her head would be thrown more or less if the full power were exerted going astern?

- A. I don't know.
- Q. I am not asking you what you know; I am asking you what you would expect, applying your scientific attainments and the power of insight which you have gained from the experience you have had?
 - A. I would not know what to expect until I got it.
 - Q. You would not know what to expect?
- A. No, sir, not in that line, because looking at that diagram [917—793] see how lazy that leaves your mind, with a right-hand wheel one way—you see these are both right-hand wheels. She starts immediately on this curve and swings over on this circle, or if she does not she keeps on going for quite a little while in her second position, the rudder being hard over in both cases (indicating on map).
- Q. Then the science on this subject has not been developed sufficiently for you to have any rational expectation? A. Each ship is different.
 - Q. Each ship is different? A. Yes.
- Q. And there may be a tremendous difference in ships?
- A. Although all five I investigated had the same tendency that way; some had twice as much, some three times as much.
- Q. Then you have produced the one that had the least tendency to curve?
- A. No, sir, I took the one with the most spots so that I could have a curve.

Q. And there were some that had twice as much tendency? A. Yes.

Q. And some three times?

A. Well, at least two and one-half times.

Q. And you can produce those here? A. Yes.

Q. But you did not?

A. No, I did not, and I will tell you why I did not produce them; there were only two spots given and I could not make a curve with two spots. This was the only fellow who took his observations every 15 seconds. The other fellows did not.

Q. Let me get back to the main question and show you what the question was about. This was the question:

"Q. If the 'Beaver' is making 13.572 knots per hour through the water, and without reducing speed changes her helm [918—794] to starboard, and after her head under the starboard helm has swung one-half point to port her engines are then put full speed astern, and then her helm is put hard-a-port, would the vessel under these maneuvers be swinging rapidly to starboard at the end of one minute or one minute and a half, after her helm had been put hard-a-port'"?

And you answered to that:

"A. No, sir." In cross-examining you on that question I asked you to produce the data on which you based your answer and you produced this plot here showing a very much less rate of turning.

A. I don't know whether it shows less or more.

- Q. Didn't you say there were others showing $2\frac{1}{2}$ times?
- A. Yes, others, but others that I did not plot because I did not have enough data to plot them with.
- Q. But they showed that they turned at a very much greater rate? A. Yes.
 - Q. Much more rapidly?
- A. Yes, but they were lighter vessels and smaller vessels than this one here.
- Q. The "Beaver" is a very much lighter draught vessel than the "Hankow"?
- A. Yes, lighter draught but not very far from the length.
- Q. As a matter of fact, do you know what the "Beaver" drew on that day?
- A. About 17 or 18 feet, was it not? I don't remember now.
- Q. Do you know what this vessel drew on that day?
- A. Is it not marked there? My recollection is about 23 feet or 24 feet.
 - Q. 23 or 24 feet?
- A. That is my recollection. I will not be positive. [919—795]
- Q. 24 feet 6 inches and 23 feet 6 inches. And the other one was what?
- A. About 18 or 19 feet, or 17. I don't remember what it was. You have it there.
- Q. The draught was 16 feet—the mean draught was 16 feet, was it not?

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A. Was it 16 feet 4 inches? There were some odd inches, I think.

Q. In other words, in determining whether or not the "Beaver" would be turning rapidly to starboard at the end of one minute or a minute and a half, you had to use your scientific imagination, did you not? You never had plotted a ship exactly like the "Beaver" had you? A. No.

Q. And you never used the "Beaver" herself under those circumstances? A. No.

Q. How did you come to make this answer that she would not be swinging rapidly to starboard if you never permit yourself to hazard a scientific conjecture but always examine the problem and solve it before you let your mind come to any conclusion?

A. Because this one shows very plainly that they go opposite from what you would expect from the rudder, and shows it very distinctly. I am basing it on that.

Q. But will your refusal to give a judgment or an estimate in other cases which I have asked you because you never permit your mind to come to a conclusion unless you solve the problem, how could you say that if the "Beaver" when her draught was only two-thirds this—

A. (Intg.) Excuse me for interrupting you but you asked me if I could determine the quantity. That is only determining the direction, not the quantity.

Q. In other words, you exercised your scientific imagination for your counsel on questions of direc-

(Testimony of James Dickie.) tion but not quantity—is that it? [920—796]

- A. Direction but not in quantity.
- Q. How did you come to the conclusion that she would not be swinging rapidly?
- A. Because she would have an impetus the one way to start with which would bring her down to about the 10 knots, would continue down to 10 knots and then I was pretty sure from 10 knots down what was going to happen.
- Q. Didn't you just say you could not estimate above the 10 knot astern?
- A. Neither could I with the vessel going astern, but the vessel was going ahead; the rudder was in the opposite direction.
- Q. You can exercise your scientific imagination when the vessel is going one way, but not the other?
- A. Yes. In fact, the rudder has very little directive force, going astern. Going ahead it always has a directive force, unless the ship is very extremely badly shaped.
- Q. Was this question put to you based upon the power of the rudder alone? Is that what you referred to when you said "swinging rapidly"?
 - A. I took the question just as it was put to me.
 - Q. I will put it to you:
 - "Q. If the 'Beaver' is making 13.572 knots per hour through the water, and without reducing speed changes her helm to starboard, and after her head under the starboard helm has swung one-half point to port her engines are then put full speed astern, and then her helm is

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put hard-a-port, would the vessel under these maneuvers be swinging rapidly to starboard at the end of one minute, or one minute and a half, after her helm had been put hard-a-port?"

Your answer then had reference to the force of her helm, did it not? A. Yes. [921—797]

- Q. You were not testifying, then, in regard to the effect of her right-hand propeller in throwing her head?
- A. No, because she had a right-hand propeller—I found that out.
- Q. Did you know it when you answered the question?
 - A. I did know it when I answered the question.
- Q. When you said she would not be swinging rapidly to port, were you testifying with reference to the power that a propeller might exercise or only with regard to the helm?
- A. To the influence of the propeller and the helm also, both of them.
 - Q. Both of them? A. Yes, sir.
- Q. What do you mean by "rapidly"? Would you say under these circumstances if she swung 3 points, that that would be rapidly?
 - A. In how long a time?
 - Q. In a minute.
 - A. I would say that that was fairly rapid.
- Q. So that when you answered this question, you did have an opinion that she would not be swinging three points?
 - A. I knew what the rudder would do, in the first

part of the question, that is, when the rudder was put hard to starboard, I think it was—I don't remember just what it was—I knew what that would do exactly. Then I knew it would take some time to expend that force which was already put in before the force should begin to swing the other way.

- Q. Well, now, let me ask you again, you did have an opinion as to whether or not at the end of a minute, under the conditions described in this question, she would swing three points to starboard, did you?
- A. That she was going to swing in the opposite direction. That was my idea. She was not going to swing to starboard at all. [922—798]
 - Q. It was your idea she would be swinging to port?
 - A. Yes.
 - Q. And that is your opinion at the present time?
 - A. That is my opinion at the present time.
- Q. Now, suppose you were to discover, Mr. Dickie, that instead of that being the fact, she did in a minute and a half actually swing—under trial trip conditions—between 3 and 4 points; would that seem to you a wild result?

Mr. McCLANAHAN.—You mean swing to starboard, don't you?

Mr. DENMAN.—Yes, swing to starboard.

- A. Yes.
- Q. That would seem wild to you? A. Yes.
- Q. Have you had experience enough in this line to make you feel confident?
- A. I have had a good deal of experience in the steering line but not much in backing. In going

ahead I have had a good deal of experience.

- Q. Have you had enough experience in the backing line to make you certain in your own mind—of course, you never have done this actual thing, have you?
 - A. No.
- Q. You would have to exercise your scientific imagination?
 - A. Imagination or knowledge or investigation.
- Q. You cannot approach this question by sweeping everything out of your mind because then you would not have anything; you have to apply your prior acquired knowledge to this problem?
- A. When the problem comes up you go and hunt for the information.
- Q. You never had any information giving you this actual problem, did you?
 - A. No, but I hunted for similar cases.
- Q. I thought you said you could not move in your mind from one case to a similar case? [923—799]
 - A. You can move to a similar case; everybody can.
- Q. I am glad to hear that. If you read your testimony you will find that you said you could not.
 - A. You won't find that I said that.
- Q. I won't find those exact words, but I will find answer after answer where you said that you never permitted yourself to give an answer on mere data, on mere theory. A. I did not say so.
 - Q. I admit you did not use those exact words.
 - A. You change my language.
 - Q. That may be, but the meaning is the same.

- A. No the meaning is not the same.
- Q. I think you will find, when you examine the record, that it will bear that construction.
 - A. No, it will not bear that construction.

(A recess was here taken until 2 P. M.) [924—800]

AFTERNOON SESSION.

JAMES DICKIE, further cross-examination, resumed:

Mr. DENMAN.—Q. Mr. Dickie, we were on the question of how much she would swing in a minute, presuming she was going ahead at the rate of 12 knots, and her engines were sent full speed astern; the question being how much she would swing to starboard under those circumstances. Your answer was you did not care to hazard any estimate as to how much she would swing, and I suppose you would want to give the same answer if she was going 13 knots?

- A. Yes.
- Q. Suppose a vessel were moving along at the rate of 13.572 knots and without reducing speed changes her helm to starboard, and after her head is under the starboard helm she is swung half a point to port; supposing that condition, her helm is put hard-a-port, how long would it take her to correct the swing?
- A. She would never correct the swing I don't think.
- Q. I am presuming now she is not going astern at all. A. Yes, I know what you mean.
 - Q. Will you explain that answer?
 - A. Yes. Give me the diagram again of the "Han-

kow" and I think I can explain it and make it intelligent. The vessel was aport helm; that vessels turns to port; now, the "Beaver" will do the same thing when she is backing, from 10 knots down.

- Q. Suppose a vessel is going ahead at 13.572 knots through the water and her helm is put to starboard but not hard over?
 - A. That is a very indefinite thing.
- Q. Well, that is all you have. That is what you had here, and then— [925—801]

Mr. McCLANAHAN.—He had more than that.

- Mr. DENMAN.—Q. You say it is a very indefinite thing? A. Yes.
- Q. For instance, the harder you put it over the more rapidly she will swing? A. Yes.
- Q. But when you answered this question you didn't know how far it was put over to starboard, did you?
 - A. I understood it was put hard over.
 - Q. You did? A. Yes.
- Q. That would materially affect your answer, would it not?
 - A. Yes; she would not get as much of a kick.
 - Q. What do you mean by "as much of a kick"?
- A. There would not be as much power put into the vessel turning to swing her as if she was put hard over.
- Q. So the answer to the question as to how much the "Beaver" would turn her head is dependent then, so far as your answer is concerned, upon the supposition that the helm was put hard over the first time?

- A. Yes, but you gave a qualifying element in that question, you said the ship swung, showing the force was in there.
- Q. I am presuming she would swing. But if the helm was hard over she would swing faster than she would otherwise? A. Yes.
- Q. If you put the helm very little over, and it took a longer time to get the half point, she would have less of a swing to her when she reached the half point, would she not?
- A. A little less, yes; not if she swung half a point—half a point, or whatever you said she swung.
- Q. But when she swung half a point she still had the swinging [926—802] motion in her?
- A. She still had the swinging motion in her. There is no question about that.
- Q. If that half point is reached rapidly under a hard over helm, the swinging at the end when she has reached a half point will be more rapid? A. Yes.
- Q. So that your answer to this question was based on the theory that when she reached her half over point, a half point over, she was swinging rapidly as the result of a hard-a-starboard helm.
- A. Yes; put it that she was swinging—leave the "rapidly" out just now.
 - Q. Suppose she was swinging just rapidly?
 - A. There would be a little less directive force.
- Q. And, of course, your answer as to whether or not she would be swinging rapidly to starboard at the end of the maneuver that is described here, is dependent upon the rate she had when she ended her

(Testimony of James Dickie.) swing a half point to port?

- A. No, only part way because the helm put aport has the tendency to swing her to port when she is backing from 10 knots down. Get that into your head firmly.
- Q. I thought you said you could not apply any of the tendency from 10 knots down to this situation?
- A. I did not say that. I said you could apply that from 10 knots down.
- Q. To a vessel going at the rate this was going? You told me distinctly Mr. Dickie—
- A. (Intg.) I told you between 10 and 12 knots I could not apply it, that I did not know what would happen in that particular place. From 10 knots down I was positive.
 - Q. You are positive, are you?
 - A. Yes, I am postitve. [927—803]
- Q. Have you ever made the calculation on a vessel the proportions of the "Beaver"?
- A. The proportions of the "Beaver" would not make any difference. I have looked up some steering trials which are in this book of White's and he says the same thing.
- Q. We will examine those later on. Now, let me ask you the question again: having gotten the vessel over half a point on your starboard helm, half a point to port that would be, the vessel being hard-a-starboard; suppose your helm is put hard-a-port without the propeller reversing—just going ahead, how long would it take her to correct the swinging motion to port?

- A. I could not answer that exactly. I know that she would correct it before very long, but I don't know just how long it would be in seconds.
- Q. Would it be about the same that it took to get over? A. No, it would be a little longer.
 - Q. Why would it be a little longer?
- A. Because she had a directive force she had to overcome.
 - Q. That is all you have to overcome, is it not?
 - A. Yes, but you have it going in one direction.
- Q. How long would it take to correct the directive force?
- A. It would take a little time, I don't know how long.
- Q. It would not take as long as it did to swing the whole half point, would it?
- A. I don't think it would, not with a vessel of the "Beaver's" type.
- Q. So that that correction arising from the shifting of the helm from hard-a-port to hard-a-starboard would take place in much less time than the whole time consumed in going over to the half point? The mere correction in the swinging would take [928—804] much less time than the whole time occupied in the swinging over of the half point?
- A. Yes, it would take a little less time; some appreciably less time.
- Q. So at the end of that time she would be going straight ahead in the water; that is correct, is it not—straight ahead in the water? A. Yes.
- Q. I am not speaking with reference to her former course. A. I understand.

Q. From that time following the conditions would be exactly like the theoretical question you did not want to answer, would they not?

A. No, because I don't know exactly what speed she would be going at at that time.

Q. Presume now that—

A. (Intg.) I have told you repeatedly—

Q. (Intg.) One moment, Mr. Dickie-

A. (Intg.) Let me get done first. I have told you repeatedly I don't know what would happen, whether the starboard helm was put to starboard or put to port backing between 10 and 12 knots; but below 10 knots I am pretty positive on what would happen because I have five vessels and they all went the same way and some of them were of the "Beaver" type—not the size of the "Beaver" but the "Beaver" type—one of them was a yacht—a sharp yacht, not as large, she was only about 180 feet long.

Q. We will go into all that later on.

A. The tendency was all in this direction.

Q. In what direction?

A. The direction on this sheet here.

Q. What do you mean by that? [929—805]

A. I mean that the vessel backing with her a-port helm, her head goes to port—from 10 knots down, with a right-handed wheel, if the rudder and everything are normal about the ship. If the rudder is bigger below it will be changed a little bit, and if it is bigger above the center it will be changed a little bit. But I know about the "Beaver's" rudder. Remember, when this vessel was going over these

(Testimony of James Dickie.) courses, she had the rudder just as indicated there.

- Q. Did you see it yourself?
- A. No, but that is the testimony.
- Q. Whose testimony is that?
- A. The testimony published before the British Association. And there was only one error in the testimony, where he had west substituted for east.
- Q. Well, that would make quite a difference in the result, would it not?

A. No, it didn't make any difference because it had not been plotted. All these spots came in fair except that one spot. If you go to the Berkeley Library you will find that that is so.

Mr. McCLANAHAN.—The witness is referring to Libelants' Exhibit 16.

Mr. DENMAN.—Q. And you are positive about that, are you?

- A. I am positive about that. This was done by the British scientists. The committee said the evidence was conclusive. It was against the theory which had been held up to that time.
 - Q. How did they say this—in what way?
 - A. They said they were thoroughly satisfied.
 - Q. Who do you mean by "they"?
- A. The committee. I don't remember the names of them. I can get the names of them. [930—806]
- Q. How did that finally affect the scientific body you are speaking of?
 - A. Well, they believed their statement.
 - Q. How do you know that?
 - A. Because they did not contradict it. In these

societies they are very quick about contradicting—remarkably quick.

- Q. In other words, the whole organization of engineers very much resembles its component parts.
- A. Very much. Before the discussion is through you will get the truth pretty well threshed out.
- Q. I don't doubt that, Mr. Dickie, I don't question it. Now, as I understand it, you said that when the vessel is correcting her swing to port by her harda-port helm, and is going straight ahead at the speed of 13.572 knots, and her propeller is put full speed astern, that you don't care to state how much she would swing? A. No.
- Q. And, as I understand it, you would not say that a swing of three points was anything that your scientific mind would be shocked at?
 - A. I don't know how much she would swing.
- Q. Well, you remember the questioning this morning; your answers are the same now as they were then as to that situation?

 A. Just the same.
- Q. Nothing you have thought of during this noon would change your opinion in that regard?
- A. No. If you ask the broad question of direction then my answer remains just exactly as it was, the direction of the swing; if you talk quantity of swing I don't know because the five vessels all varied. There was no variation in direction but there was variation in quantity,—a large variation. I would have plotted the whole five if there had been enough data. Most [931—807] of them had only two points and you cannot plot on two points. This was

the only one who had taken his observations—I think it was every 10 or 15 seconds. He was the only one of an observant nature and was the only one that had all the data you could use. It is very, very seldom that data can be used completely. This was the most complete data I had ever seen.

Q. You have never tried this thing out yourself, have you, on any vessel?

A. No, sir. I have tried the steering qualities but not the backing.

Redirect Examination.

Mr. McCLANAHAN.—Q. Mr. Dickie, what would be the direction of the swing, as distinguished from the quantity of the swing, under the starboard question, that is, where your wheel is put hard-to-port after it has first been put to starboard and the engines reversed?

A. I don't exactly catch that.

Q. Well, the "Beaver" now has her wheel put to starboard and she swings half a point to port; then her wheel is put hard to port and her engines are reversed, and she is making at the time just prior to the reversing of the engines 13.572 knots; what would be the direction of the swing—to port or to starboard? A. To port.

Q. Not to starboard?

A. Not to starboard. From 13 knots to 10 knots I am not sure but I think and I feel pretty sure—but not dead sure—that she would swing with her helm ahead, that she would get a kick with her helm ahead and it would be enough to keep her from swinging the other way until the port helm caught her.

Q. In this swinging question which Mr. Denman has been examining [932—808] you on, you said that your understanding of the question was that it referred to a hard over starboard helm? A. Yes.

- Q. Now, as a matter of fact, the question simply says that the helm is put to starboard, and under that starboard helm she swings half a point to port. That is the question. A. Yes.
- Q. Now, would your answer to the question be affected by that new understanding of the question?
 - A. Slightly, but very little.
 - Q. Would your answer still be no?
 - A. It would still be no; positively no.
 - Q. How many vessels have you launched yourself?
 - A. About 130 or 140.
- Q. And did you take data of the time that these vessels would stop in the launching operations?
 - A. On several of them, on six or seven of them.
 - Q. Have you got that data with you?
 - A. I have.
- Q. It is open to the inspection of counsel for the respondent, is it? A. Yes.
- Q. Mr. Dickie, with the "Selja" making 3 knots per hour, and while making 3 knots per hour her engines are stopped, would it be possible for the "Selja" to come to a standstill or to come at rest in the water in three minutes?
 - A. No; positively no.
- Q. You spoke of using the "Wisconsin" data with reference to this stopping of the "Selja"?

- A. I did.
- Q. You said that there was a difference in the speed and the displacement and the length of the "Wisconsin" from the "Selja"? A. Yes. [933—809]
- Q. Does that difference make any difference in the effectiveness of the "Wisconsin's" data as applied to the "Selja"?
- A. I took that into consideration in making up my time for the "Selja."
- Q. So that all that has been considered in your answer?
- A. It has all been considered. There is a difference in the displacement from 7,000 to 11,000 tons.
- Q. That has all been considered when you applied that data to the "Selja"? A. Yes.
- Q. You said you understood Mr. Heynemann's stoppage curves that appear on this blue-print?
 - A. Yes.
- Q. And I believe you characterized them as theoretical? A. Purely theoretical.
- Q. As distinguished from your testimony on the question of stoppage, which you said was practical?
 - A. Purely practical; almost purely practical.
 - Q. What do you mean by that?
- A. I mean that all I had to do was instead of taking into consideration the wetted surface and the stored up energy, and all that sort of thing, I took the two displacements of the vessels—the relative displacements—which is a simple matter, the "Wiscon-

sin" and the "Selja."

Q. The stoppage data for the "Wisconsin" was practical? A. It was practical.

Q. And you simply applied that to the "Selja"?

A. Yes. That was taken by the Government Engineers. But there is no man who can tell when a ship is stopped. So I would be inclined to take Mr. Heynemann's data in preference to my own for the time.

Q. Do you know how long it took the "Wisconsin" to stop under [934—810] this trial when she was going at 6 knots?

A. 20 minutes is my recollection.

Q. In Mr. Denman's examination of you you said that a large swell would affect the speed of a ship; you were not further cross-examined on that particular statement. What do you mean by that? To what extent would that effect the speed of a ship?

A. If you give me the height of the swell I think I could answer it pretty closely on the "Beaver" case.

Q. Let us get down to something practical. You know the North Channel? A. Yes.

Q. You have passed through it? A. Yes.

Q. Do you know what is called the Potato Patch?

A. Yes.

Q. Let us assume that the "Beaver" is passing through the North Channel at a speed of 15 knots per hour, that there is a swell breaking over the Potato Patch westerly, and she directs her course after she leaves the North Channel into this swell in a westerly direction; to what extent would that, in

(Testimony of James Dickie.)
your opinion, affect the 15-knot speed of the
"Beaver"?

A. I don't know because one thing has no connection with the other whatever. How much water is on the Potato Patch?

Captain KIDSTON.—4 fathoms.

The WITNESS.—That is 24 feet.

Mr. DENMAN.—And let me add this suggestion, it is breaking 4 breakers on the Potato Patch before it gets across into the North Channel.

A. That would not be a very big sea when it would break. I think about a 7-foot sea would break on the Potato Patch—6½ feet or 7 feet. I am talking of the sea in the North [935—811] Channel. I think about 6 or 7 feet would break on the Potato Patch.

Mr. McCLANAHAN.—Q. I am simply stating to you that it is breaking on the Potato Patch in order to give you some idea of the swell.

A. I am trying to get the height of the sea. I could figure it out but I could not figure it sitting here.

Q. Would such a swell affect the speed of the "Beaver" after she left the North Channel to the extent of retarding her speed 3 knots per hour?

A. No.

Q. You said there were certain sea conditions that would affect the speed of the "Beaver"?

A. Yes.

Q. What are those sea conditions?

A. A gale of wind, a heavy sea.

San Francisco & Portland Steamship Co. 1101
(Testimony of James Dickie.)

- Q. By a heavy sea do you mean one accompanied with wind? A. One accompanied with wind.
- Q. Would a smooth swell affect the speed of the "Beaver" materially?
 - A. Slightly, but not much.
 - Q. Have you had any experience in that matter?
 - A. Yes.
 - Q. Please state what it is.
- A. When I crossed on the "Siberia" we had wind. It was put at about 24 miles an hour, and we had, as near as I could measure it passing along the ship's side, about 7 feet 9 inches of sea. The stern was going up and down 24 feet and 3 inches, as near as I could measure it, and it was measured very closely, and the speed, according to the day's run, was only twenty-three one hundredths of a knot reduced from the day before and the day after.
- Q. How was she headed with reference to this wind and sea?
- A. I don't recollect now. I have the direction but I don't recollect it. [936—812]
 - Q. Was it a following sea?
 - A. No, I think it was a head sea.
- Q. Have you ever had any experience on the Atlantic Ocean? A. Yes.
 - Q. Please state it.
- A. I measured the "Majestic" one time. Her stem was going up and down 61 feet. She had an ordinary speed of 20 knots and she was reduced that day to 18¾ knots.

- Q. Was there any wind blowing?
- A. A gale wind, a heavy gale wind.
- Q. That was one and $\frac{3}{4}$ knots in the whole day's run?
- A. No, one knot and a quarter per hour average for the day. She was a pretty long ship—she was 560 feet.
- Q. Mr. Dickie, I understand that you have had practical experience and knowledge with reference to wave action, as well as book action.
 - A. I have studied the subject.
- Q. You have made experiments yourself, have you not? A. Slightly, yes.
- Q. What have you studied on the subject—what books?
- A. I have studied Froude partly, and papers read before the Society of Naval Architects, of which I am a member. I have studied White, and I have studied Byles.
 - Q. Have you any of those works with you?
 - A. I have White's works here with me.
 - Q. What White is that?
 - A. That is the British Naval Constructor.
 - Q. What is the work that you refer to?
 - A. On waves.
 - Q. That is not the name of the book, is it?
- A. No, it is "White's Naval Architecture," I think. A manual of naval architecture—by W. H. White.
- Q. Can you state whether that is a standard work, or not? [937—813]

A. It is a standard work.

Q. Does the statement of the author of that work confirm your statement with reference to the wave action?

A. Yes. May I read a paragraph?

Q. Well, wait a moment, please. That work is here and is open to the inspection of the counsel, is it?

A. Yes. It answers Mr. Denman's question very well about the waves on the cliff.

Mr. DENMAN.—I don't want any better answer than your's, Mr. Dickie.

Mr. McCLANAHAN.—Q. That was a head sea on the "Majestic," was it?

A. A strong head sea and a gale of wind. We had a 65 or 70 mile breeze.

Further Recross-examination.

Mr. DENMAN.—Q. The "Majestic" is a twinscrew, is it not or is it triple?

A. Twin; overlapping slightly.

Q. What was her tonnage?

A. Her displacement I think was about 13,000 tons—I think.

Q. And the "Siberia" was twin-screw?

A. The "Siberia" is twin-screw.

Q. What is her displacement?

A. I think she is about 10,000—no, she must be more, she must be about 12,000 or 14,000.

Q. What is her length?

A. Her length, I think, is 560 feet.

- Q. The "Siberia's" displacement is about 27,000 tons, is it not? A. The "Siberia"?
 - Q. Yes. A. No.
 - Q. How much is it?
 - A. I don't think she is over 13,000 or 14,000.
- Q. That would not make any difference though, would it? [938—814]
 - A. It would make a little.
 - Q. It would make a good deal, would it not?
 - A. Yes, a good deal.
- Q. As a matter of fact, there is a point where when you increase the displacement of a vessel the swell and sea conditions have practically no effect on a vessel—that is true, is it not?
 - A. The larger the vessel the less effect it has.
- Q. I know, but there is a point where it makes a very slight difference?
- A. Very slight. The wind has more to do with it than the sea.
- Q. You said a 65-knot breeze, did you not? Both vessels are high out of the water?
- A. That breeze, I think, would take about threequarters of a knot off the "Lusitania."
 - Q. Three-quarters of a knot in a day's run?
- A. No, in an hour; between five-eighths and threequarters of a knot.
- Q. What would you say if the captain of the "Beaver" should state that he has gone into a sea and wind on this coast which has brought down the speed of the "Beaver" to 5 knots?
 - A. I would believe him.